

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	:		
James B. Melesky	:		
	:		
Appln. No. 10/024,478	:	Art Unit:	3637
	:		
Filed: 21 December 2001	:	Examiner:	A. Phi Dieu Tran
	:		
For: INSULATION COVER FOR ATTIC	:	Docket No.:	82/1376US
CLOSURES	:		Formerly: 13811

Commissioner for Patents
Alexandria, VA 22313

Additional Supplemental Rule 132 Declaration
(Secondary Considerations of Non-obviousness)

Being of legal age, I, James B. Melesky, declare and state as follows:

- 1) This declaration is to provide additional material to establish secondary considerations of non-obviousness in the above referenced application and is an additional supplement to the Rule 132 Declarations previously filed in this case on July 27, 2005 and January 31, 2006.
- 2) I am the inventor of the above referenced application and familiar with its disclosure and claims. I am also the President of ESS Energy Products, Inc (f/k/a Energy Sentry Solutions, Inc.) which manufactures and sells a device under the Trademark "The Energy Guardian." I am familiar with the design of The Energy Guardian®.
- 3) I have reviewed claim 14 of the above referenced application, as amended, and believe that The Energy Guardian® embodies the elements of that claim as currently amended.
- 4) I have attached hereto additional exhibits demonstrating the perspective of persons knowledgeable and experienced in the art, and nationally recognized, who unequivocally state the invention is an innovative step beyond the prior art solving a long-felt need in industry and which show commercial success of the product from use by those in the industry. This evidenced perspective is indicative of the non-obviousness of my invention.

- 5) These additional exhibits are provided to supplement the previously provided exhibits, which are believed to still be indicative of non-obviousness of the invention for the reasons previously discussed.
- 6) I have attached hereto as Exhibit L a printout from the U.S. Department of Energy detailing the success of the Weatherization Assistance Program in reducing energy bills through energy efficiency.
 - a) The Energy Guardian® Kits have been used as an integral part of weatherization training for a number of agencies in the Weatherization Assistance Program, as set forth in Exhibit E.
- 7) I have attached hereto as Exhibit M a letter I received from Doug Rye of Doug Rye & Associates, Inc.
 - a) Mr. Rye has worked for over 35 years in helping homeowners lower their utility bills.
 - b) Mr. Rye states that The Energy Guardian® Kits "have set a national standard."
- 8) I have attached hereto as Exhibit N the Energy Services Bulletin on the U.S. Department of Energy's webpage listing the knowledge and expertise of Doug Rye in the field of energy efficiency. The article further refers to Doug Rye as maybe "the best-known residential energy consultant in the nation."
- 9) I have attached hereto as Exhibit O a letter published in Home Energy Magazine from Mark Ternes, a scientist at the Buildings Technology Center at Oak Ridge National Laboratory.
 - a) Mr. Ternes expresses his doubts and skepticism of the cost-effectiveness and efficiency in light of assumed structural limitations and premium pricing of The Energy Guardian®.
 - b) Mr. Ternes further estimates a reduction in the air leakage rate of the home through the use of any air sealing product to be only 100 CFM for the attic ladder cover and specifically expresses doubt that The Energy Guardian® would be cost-effective with such a minimal reduction.
- 10) I have attached hereto as Exhibit P various Blower Door Readings and Tests and Pressure Diagnostics performed before and after installation of The Energy Guardian® evidencing an average reduction in air leakage rate for at least six weatherization agencies, part of the federally funded weatherization program, of at least 500 CFM50 and

as much as 1400 CFM50 for attic ladder covers and 150-500CFM50 for attic push up panels.

a) These agencies must use highly calibrated blower door devices so as to produce consistent results which comport with strict federal standards.

- 11) I have attached hereto as Exhibit Q a letter I received from Fran Rice, an Energy Services Coordinator at Tompkins Community Action, which is a federally sponsored Weatherization Assistance Program agency.

a) Mr. Rice states that other products may have made improvements, but “didn’t come close to solving the problem like” The Energy Guardian® did, and none of them met Tompkins Community Action’s standards.

b) Mr. Rice states that The Energy Guardian® Kits meet their standards because the “air-sealing qualities ... are great.”

c) Mr. Rice describes the practical advantages generated by the claimed structure, specifically by the fact that “the lid of your kits fits right into the frame without any hooks or other devices to secure the air seal.”

- 12) I have attached hereto as Exhibit R a letter I received from Marlene W. Barbour, the Weatherization Manager at Atlantic Human Resources, Inc, which is a federally sponsored Weatherization Assistance Program agency.

a) Ms. Barbour describes the agency as dedicated to decreasing energy costs for low income families.

b) Ms. Barbour states that The Energy Guardian® is superior to their own products because of the ease of use and the quality of the heavy duty air seal “created by the lid sliding into a frame.”

- 13) I have attached hereto as Exhibit S an email from a pleased homeowner who recently had The Energy Guardian® installed.

a) She explained how thrilled she was the product and glad she chose it “instead of the attic door [she] was considering. You pay for what you get.”

- 14) I have attached hereto as Exhibit T an email I received from Jim Donovan at CBS3, a Philadelphia CBS affiliate. The CBS consumer report featured a segment on The Energy Guardian®.

- a) The segment received a rating of 4.7, or roughly 139,000 viewers, a “very good” rating, illustrating general consumer interest and prospective market share.
- 15) I have attached hereto as Exhibit U an email I received from Pam Bader, a potential customer.
- a) Ms. Bader explains that she came to hear of the product by word of mouth, an example of how sales for The Energy Guardian® are made.
- 16) I have attached hereto as Exhibit V an email I received from John Ohm, a private contractor who does work for low income programs that are federally funded through the Weatherization Assistance Program.
- a) Mr. Ohm has informed me that he so prefers The Energy Guardian® that he will install it even when the programs do not pay the premium price, because he believes it is so much better for the homeowner.
- 17) I have attached hereto as Exhibit W an email I received from Sandie Stanzione, a recent customer.
- a) Ms. Stanzione explained how happy she has been with *The Energy Guardian* and suggested it to others as well. This exemplifies the word-of-mouth advertising responsible for much of *The Energy Guardian*’s commercial success.
- 18) I have attached hereto as Exhibit X my electric bills evidencing the energy savings since I installed The Energy Guardian®.
- 19) I have attached hereto as Exhibit Y an email I received from Wayne Raffety, a recent customer, who stressed his satisfaction and the dramatic improvement with the installation of The Energy Guardian®. Mr. Raffety further explained that the product is so effective that additional reinsulation is needed to equally distribute the captured heat.
- 20) I have attached hereto as Exhibit Z an email I received from Dan Pourreau, a recently satisfied customer. Mr. Pourreau attached a copy of his gas bill, showing a decrease of 0.8 Ccf/day from the previous year, and after installation of The Energy Guardian®, despite a colder winter and the addition of a finished basement. He reported an estimated savings of \$189 in one month due to The Energy Guardian®.

- 21) I have attached hereto as Exhibit AA an email I received from Brian Dietrich, a recently satisfied customer, citing a noticeable improvement and a "huge difference" with the installation of The Energy Guardian®.
- 22) I have attached hereto as Exhibit BB further elaboration by Mr. Dietrich of Exhibit AA.
- 23) I have attached hereto as Exhibit CC an email I received from Linda Copeland at Progressive Energy Solutions, Inc. explaining how she recently installed The Energy Guardian® and that "it works!"
- 24) I have attached hereto as Exhibit DD an email I received from Jeff Stell, a recent customer. Mr. Stell found that there was a "NOTICEABLE difference in room temperature" and plans to recommend The Energy Guardian® to friends.
- 25) I have attached hereto as Exhibit EE a letter I received from Vic Aleshire, President of the Comfort Company.
 - a) Mr. Aleshire has worked in the residential energy conservation business for over 25 years, including speeches at national conferences, intimate involvement with the Department of Energy's Weatherization Assistance Program, and collaboration with Oak Ridge Laboratory scientists.
 - b) Mr. Aleshire stated that the results obtained with The Energy Guardian® "were far greater than any alternative either commercially available or individually constructed."
 - c) Mr. Aleshire expresses his own previous skepticism, along with the skepticism of the Oak Ridge scientists. He explains that the most respected scientists at Oak Ridge "consistently posit that no more than a 50 CFM50 reduction for hatches and a 100-200 CFM50 reduction for pull down ladders are achievable with any kit or constructed measure."
 - d) Mr. Aleshire explains that despite the previous skepticism, they have consistently recorded 200-400 CFM50 reductions for attics with hatches and 600-900 CFM50 reductions for attics with pull down ladders.
 - e) Mr. Aleshire also relates the zero smoke stick reading achieved while using The Energy Guardian®, which illustrates excellent and surprising air sealing properties.
- 26) I have attached hereto as Exhibit FF invoices to several state programs and/or state contractors showing their use of The Energy Guardian®,

as well as a letter from Joe Wehrhahn, President of NJ-ALPHI, an association of home inspectors for the entire state of New Jersey documenting state government purchase and acceptance of The Energy Guardian®.

a) These invoices and letter indicate acceptance by a number of state government programs of The Energy Guardian® as a valuable product to be used in their states and success of the product in market penetration outside of the local area.

b) These invoices do not show every sale of The Energy Guardian®, but are just a small sampling provided to show distribution.

27) I have attached hereto as Exhibit GG printouts from the website for The Energy Guardian®.

a) The website depicts my claimed frame and removable closure member in The Energy Guardian®.

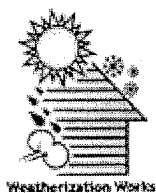
28) I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

7-16-07
Date


James B. Melesky
Inventor of U.S. Patent App. Ser. No. 10/024,478

Exhibit L

U.S. Department of Energy - Energy Efficiency and Renewable Energy Weatherization Assistance Program



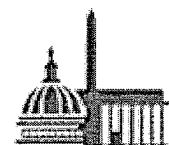
The Weatherization Assistance Program enables low-income families to permanently reduce their energy bills by making their homes more energy efficient. It is this country's longest running, and perhaps most successful energy efficiency program. During the last 30 years, the U.S. Department of Energy's (DOE) Weatherization Assistance Program has provided weatherization services to more than 5.5 million low-income families.

By reducing the energy bills of low-income families instead of offering aid, weatherization reduces dependency and liberates these funds for spending on more pressing family issues. On average, weatherization reduces heating bills by 31% and overall energy bills by \$358 per year at current prices. This spending, in turn, spurs low-income communities toward job growth and economic development.

Oak Ridge National Laboratory gives technical support and evaluations.



The Weatherization Assistance Program Technical Assistance Center provides guidance for program operations and fosters community partnerships to advance weatherization.



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[Weatherization & Intergovernmental Program Home](#) | [EERE Home](#)

U.S. Department of Energy
Content Last Updated: July 6, 2006

Exhibit M

RYE

Doug Rye & Associates, Inc.
6020 Riviera Dr., Benton, AR 72019
501-653-7931

April 4, 2007

Mr. James B. Melesky
President
ESS Energy Products
P.O. Box 400
Paoli, PA 19301

Dear Jim:

Over the last 35 years, I have helped countless homeowners lower their utility bills. As the cost of home energy continues to rise, this issue is now taking center stage across the USA.

Unfortunately, most folks start out with the idea that they need to spend a lot of money to save on their home energy bills. Though my radio show, seminars, and articles that reach homeowners in many states, I explain every day how that is not true. There are a number of inexpensive, common sense ways to lower utility bills. Saving energy in this way makes money for homeowners.

The *Energy Guardian Kits* are a perfect example of this tried and true strategy. They stop one of the most overlooked sources of energy loss in most homes -- the attic entrance. Most attic entrances are energy hogs in both hot and cold weather. They often make rooms several degrees colder in the winter and hotter in the summer. They are also comfort hogs. Left unimproved, this hog can even lead to expensive mold and roof damage.

Your kits are an important fire safety measure. Because the attic entrance is often near or even in a bedroom, it probably creates the most common need for space heaters. The National Fire Protection Association recently reported that space heaters accounted for about 19,000 injuries requiring emergency room treatment, nearly 200 deaths and \$250 million in property damage in one year.

In short, *The Energy Guardian Kits* are an essential component for any home for several important reasons. They also just make just good common sense and have a short payback period.

With your kits, homeowners stop feeding that big energy hog as soon as they are installed, not to mention that the home is safer and more comfortable.

The *Energy Guardian Kits* have set a national standard. I recommend your products to every homeowner that lives where it is hot or cold which is just about everyone. Any agency or program that provides energy saving advice should use these kits.

Yours truly,

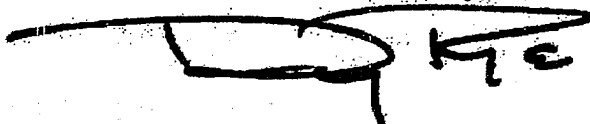


Exhibit N

Energy Services BULLETIN

[Print-friendly version](#)



In this issue

- [Energy Services Bulletin home page](#)
- [Rochester Public Utility enlists partners to study fuel cell uses](#)
- [Ark Valley and Touchstone Energy bring Caulk and Talk to local radio](#)
- [Solar power lights up East Grand Forks bike path](#)
- [Wind plus compressed air equals efficient energy storage in Iowa proposal](#)
- [Solar-covered parking generates energy, rewards public transit riders](#)
- [Energy Star honors two Partners of the Year in Western territory](#)
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- [Energy Shorts](#)
- [Equipment Loan Program news](#)

Architect turns passion for conservation into radio show

Doug Rye may be the best-known residential energy consultant in the nation. Since 1990, his weekly "Home Remedies" radio show has provided practical insight into construction ideas and energy efficiency. Troufon Radio Network, a division of [Heathcott Associates](#), distributes the program throughout the United States.

Rye received a bachelor's degree in architecture from the University of Arkansas at Fayetteville and spent 30 years with the Farmers Home Administration as the Arkansas state architect. It was at the FHA that Rye pioneered housing designs that incorporated energy-efficient building practices and geothermal heating and cooling systems.

Upon retiring from the FHA, Rye launched a second career—he helps homeowners and contractors across the country build and remodel homes and other buildings designed for maximum energy efficiency. His techniques include the use of cellulose insulation, geothermal heat pumps and energy-efficient hot water heaters. The combination of these measures and Rye's expertise has helped people nationwide in developing the most energy-efficient structures possible.

In addition to offering individualized consultation, Rye keeps a busy speaking schedule, presenting more than 150 seminars each year to utility groups, contractors and other professionals. His 2002 engagements included a presentation at the [Delta-Montrose Electric Association](#) Energy Expo. DMEA, a Western customer, sponsors "Home Remedies" on [KNZZ-AM radio](#) News Radio in Grand Junction, Colo., Saturdays at 8 a.m.



Volume 22, Number 4,
August 2003

Related articles

- [Ark Valley and Touchstone bring King of Caulk and Talk to local radio](#)

Resources

- [Heathcott Associates](#)
- [Delta-Montrose Electric Association](#)
- [KNZZ AM radio](#)

People

- [Gary Heathcott, president of Heathcott Associates](#)

Submit a story
idea

Equipment loan
program

Technical
questions

Exhibit O

----- Original Message -----

From: [Jim Gunshinan](#)

To: [Jim Melesky](#)

Sent: Wednesday, June 13, 2007 2:01 PM

Subject: Letter to the Editor

Good hearing from you Jim.

I found the letter you asked about pretty quickly. It was published in the July/August 2005 issue. Here it is, with your response:

Disputed Findings

I agree with several of Jim Melesky's points in his article on attic accesses ("Attic Accesses: High Priority or No Big Deal?" Mar/Apr '05, p.16)—namely, that attic accesses located inside the conditioned space of the house should be insulated and air sealed in a manner durable enough to last 12 years or more. However, I disagree with some of his calculations.

In calculating the average R-value of an R-38 attic with uninsulated pulldown stairs, Melesky uses just the R-value of 1/4-inch plywood for the pull-down stair without considering the film coefficients on either side of the plywood. Doing so would increase the average or effective R-value of the R-38 attic from his calculated value of 17.1 to about 30, which presents a much less ominous situation.

I also question his assertions that \$250 spent to upgrade a pull-down ladder will result in an SIR of 6.28, or that an expenditure of \$150 to insulate a pop-up hatch has an SIR of 3.71. These figures imply annual savings of about \$106 and \$37, respectively, assuming a 20-year lifetime and a uniform present value factor based on a 3% discount rate.

I performed my own check on these projected savings using DOE's National Energy Audit (NEAT), which is used by many states within DOE's Weatherization Assistance program. For a one-story house located in St. Louis, assuming the same fuel costs reported in the article, I estimated a total annual savings of \$14 from upgrading an attic pulldown stair; a savings of \$5 from adding R-38 insulation to 10 ft² of uninsulated attic area (the typical area of a pulldown stair); and a savings of \$9 from air sealing that effectively reduces the air leakage rate of the home by 100 CFM measured at 50 Pa (a reasonable estimate of the impact from air sealing an existing pull-down stair that is in poor condition). Furthermore, I estimated total annual savings of just \$27 for a house located in International Falls, Minnesota.

Based on my calculations, I must conclude that Melesky's savings estimates are overly optimistic, even for the worst-case condition implied in the article (40 square inches of leakage area) and if one assumes a severe climate like International Falls. Exaggerated claims can lead to lower-than-expected energy savings, uneconomical use of weatherization funds, and ultimately to mistrust and confusion on the part of the client population we strive to serve.

Do my calculations indicate that attic accesses should not be addressed? No! Assuming 15-year lifetimes for both the added insulation and the air sealing work, my calculations imply that up to about \$167 could be spent cost-effectively on labor and materials to upgrade an attic pull-down stair in St. Louis—less if the existing air leakage gaps are not that bad, but more in a more severe climate or if the durability of the measure could extend the lifetimes to 20 years. The challenge for the industry is to develop an attic pulldown stairway product that can be purchased and installed for these costs and that will perform for 15-20 years.

Mark Ternes
Buildings Technology Center
Oak Ridge National Laboratory
Oak Ridge, Tennessee

Author Jim Melesky responds:

The crux of Mark's disagreement with what I wrote in the article is about what the justifiable dollar amount should be to insulate and seal an attic access. In his letter, Mark concluded that \$167 is a justifiable amount for a pull down ladder, while I indicated that \$250 was the right amount. I will first explain how he actually agrees with my numbers using his own assumptions and then show how some of his assumptions dramatically understate the actual energy savings.

Mark calculates that the annual savings of this improvement should be approximately \$14/year. Over a 12-year period, this would save the homeowner about \$168. If we take the annual savings and extend it to at least 15 years as he suggested, then the savings would justify a solution of \$210. His challenge to make a product that will last 20 years justifies a \$280 amount for the upgrade. I agree with this standard and I know that there is at least one product available today with a 20 year warranty. Therefore, a \$250 investment is easily justified to insulate and seal an attic ladder if the upgrade is based on Mark's assumptions and recommendation.

While I disagree with his calculation of effective R-value, the matter is not yet clear. I agree that there is an increase in R-value on plywood due to the film coefficient. However, in the case of attic accesses, there is also significant air leakage. This allows air flow between the attic and the living area, particularly during the hot and cold weather periods. The air flow affects the film coefficient. I pursued the matter with the thermodynamic departments of some highly prestigious colleges. While there was agreement that air leakage would decrease the R-value due to the film coefficient, there were differing views on the precise effect. I have requested that this be the subject of further research by their students so that an unbiased source could develop accurate data. Even though the matter is not resolved, I used Mark's assumptions for effective R-value in analyzing savings due to an attic hatch retrofit in order to determine the most conservative results.

The assumptions Mark made about the cost of fuel and the amount of air leakage around attic accesses caused him to understate the savings from a retrofit. I used heating costs of \$1.20 per gallon of fuel oil in my analysis, while the cost of heating fuel had steadily risen to \$2 per gallon by the time Mark's letter was written. That represents a more than a 66% increase in the cost of fuel. It is clear that my calculations dramatically understate what the energy savings would actually be for this critical component of the SIR calculation. In addition, I didn't project an increase in the cost of fuel for the period of projected savings. If we look back over the past 20 years, the cost of fuel has increased dramatically. I can find no projections that indicate fuel costs will decrease or remain flat for the next 20 years. Using a cost of fuel of only \$1.80 per gallon, which is still far below current market prices, Mark's model indicates cost savings of \$400 for a pull down ladder retrofit. If we assume that the discount rate is approximately equal to the rate of increase in the cost of fuel, a \$250 upgrade produces an SIR of approximately 1.6. An SIR of 1.8 would result at a cost for fuel of \$2 per gallon.

I disagree with Mark when he states that a 100 CFM50 air leak in a one-story home due to a pull down stairs in poor condition is a reasonable estimate. He provides no reference or basis for this assertion. I find this to be an unrealistically low reading. A number of our weatherization clients have provided my firm with actual blower door test results from a number of homes with various sizes and designs in a number of different states. They typically record reductions in air leakage that range from 500 to 1,500 CFM50 for a properly upgraded pull down ladder. If we use only a 250 CFM50 reduction (but still use all of Mark's other assumptions) with a cost of heating fuel of \$1.80 per gallon, then the annual savings would be \$38 and the SIR would be 3. At \$2 per gallon, the annual savings will be \$42, and the SIR will be 3.3.

I also disagree with Mark that 40 square inches of air leakage is a worst-case condition. As any pull down ladder is used, the plywood will warp over time where the ladder is pulled down. In the worstcase environment, air gaps for the ladder opening will far exceed 40 square inches. I determined the air leakage I used in an example in my article by measuring the actual air gaps that exist in what I believe is a typical pull down ladder. The data I used in the article was entered into TREAT software, which, like NEAT, is also a DOE-approved modeling program. TREAT allows for the use of air leak reduction or measured air gaps.

While I strongly disagree with some of Mark's conclusions, I do not question his intentions. I think he simply missed some important items that compromised his results. Both my firm and I highly value our good name. We never have nor will we ever put out any bad or exaggerated information knowingly. I thank Mark for his thoughts and offer to work with him or any other reader to delve deeper into the issue, so that we can all continue to provide the highest quality and most cost-effective measures and products for the industry.

Take care,

— Jim

Jim Gunshinan
Managing Editor
Home Energy Magazine
www.homeenergy.org

2124 Kittredge St., PMB 95
Berkeley, CA 94704
Tel: (510) 931-5440
Fax: (510) 486-4673

Exhibit P

**ETOWAH COUNTY
COMMUNITY SERVICES PROGRAM, INC.**

PO Box 1888 ~ 109 S. 9th Street
East Gadsden, Alabama 35902-1888
(256) 546-9271 / (256) 546-1272 fax

**FACSIMILE TRANSMITTAL SHEET**

DATE: January 4, 2006

TO: Jim **COMPANY:** ESS Energy Products

FAX NUMBER: 1-610-640-1378 **OFFICE NUMBER:** _____

RE: _____ **NUMBER OF PAGES:** 2

FROM: Tracy Rhodes WX Coordinator of
Etowah County, Alabama

NOTES / COMMENTS

Dennis Melesky wanted me to fax my blower door readings to you after I installed your product. The readings speaks for themselves. The Energy Guardian system is a great product for any homeowner wanting to seal attic pull down stairs. It took me about an hour to install the system only because I am very picky about how I install things. I made sure that all the seams were caulked and that the product was sealed to the floor. I could have installed it quicker. I was amazed at how much of a different my blower door reading was after the system was installed.

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Blower Door Reading

Pre Blower Door: 8291(cfm) @ 50 (PA)

Post Blower Door: 6417 (cfm) @ 50 (PA)

Readings after installation of The Energy Guardian, caulking and attic insulation:
5804 (cfm) @ 50 (PA)

Name: Robert Sherick

PRESSURE DIAGNOSTICS

Number of smokers in home? 1

Unvented Fossil Fuel Heat ☐ Yes ☒ No Target MVG: 2000

Is attic heated living space? ☐ Yes ☒ No Are ceiling Roof deck common Rafter? ☐ Yes ☒ No

Estimate % of basement heated that is intentionally heated: 100 Area of home: _____ ft²

Can basement perimeter be air sealed cost-effectively? ☐ Yes ☒ No Volume of Home 12288 ft³

Estimate net free venting: 135 square inches

Wind: None Breeze Gusty Strong/sustained Fan location: Front Door
☒ ☐ ☐ ☐

Air seal the attic floor even if MVG is met.

PRESSURES						
(What was blower door set at?)						
	House/Exterior		House/Zone		Zone/Exterior	
Zones	Pre-Treat	Final	Pre-Test	Final	Pre/Treat	Final
Basement						
Attic A	-50	-50	-38	-40	-12	-10
Attic B						
Kneewall A						
Kneewall B						
Garage						
Garage Attic						
Overhang	-50	-50	-28	0	-22	-50

Instructional Notes:

- Intentional heated means heated and used daily
- Use House/exterior pressures near 50 pascals if possible
- Use same gauge to measure all pressures
- 90% or better passes

TEST	AudIt	Pre-Test	Pre-Treat	Final
CFM50 Barnt open	2884	2884	2884	2360
CFM50 Barnt closed				
Ceiling Leakage % Over A:	-76%	-76%	-76%	-80%
Ceiling Leakage % Over G:				

Instructional Notes:

- In attic, test since exterior pressure close to level of top floor ceiling
- House/Zone plus Zone/Exterior pressure should sum to House/Exterior \pm 1 Pascal
- Ceiling Leakage Ratio = (House/Zone/ House/Exterior) X 100=Percentage

Name: WINIFRED M WICHEK

PRESSURE DIAGNOSTICS

Number of smokers in home? 0

Unvented Fossil Fuel Heat ☐ Yes ☒ No Target MVG: 1500

Is attic heated living space? ☐ Yes ☒ No Are ceiling Roof deck common Rafter? ☐ Yes ☒ No

Estimate % of basement heated that is intentionally heated: 100 Area of home: 1288 ft²

Can basement perimeter be air sealed cost-effectively? ☐ Yes ☒ No Volume of Home 20608 ft³

Estimate net free venting: 75 square inches

Wind: None Breeze Gusty Strong/sustained Fan location: Front Door
☒ ☐ ☐ ☐

Air seal the attic floor even if MVG is met.

PRESSURES						
(What was blower door set at?)						
	House/Exterior		House/Zone		Zone/Exterior	
Zones	Pre-Treat	Final	Pre-Test	Final	Pre/Treat	Final
Basement	-50	-50	-42	-18	-8	-32
Attic A	-50	-50	-45	-50	-5	0
Attic B						
Kneewall A						
Kneewall B						
Garage	-50	-50	-50	-50	0	0
Garage Attic						

Instructional Notes:

- * Intentional heated means heated and used daily
- * Use House/exterior pressures near 50 pascals if possible
- * Use same gauge to measure all pressures
- * 90% or better passes

TEST	Audit	Pre-Test	Pre-Treat	Final
CFM50 Bsmnt open	2209	2209	2209	1422
CFM50 Bsmnt closed	1443	1443	1443	1283
Ceiling Leakage % Over A:	-90%	-90%	-90%	-100%
Ceiling Leakage % Over G:				

Instructional Notes:

- * In attic, test sence exterior pressure close to level of top floor ceiling
- * House/Zone plus Zone/Exterior pressure should sum to House/Exterior +/- 1 Pascal
- * Ceiling Leakage Ratio = (House/Zone/ House/Exterior) X 100=Percentage

Blower Door Test/Building Tightness/Chimney Safety Test

House Information

Job# 3237 Date: 7/3/02
 Job Name Rodgers Town Prospect Park
 Blower Door Test: Yes ☒ No: Give Reason: # of conditioned stories: 2
 Volume: 15,200 Basement Included: Yes ☐ No ☒
 Surface Area: 2325 Type Model: Minps. #2 (#3)
 Exposed ☐ Normal ☒ Shielded ☐ Method Used for CFM50:
 Type of structure: Frm Single Computer Graph/ direct read
 PRE TEST(CFM50): 4931 Tester: TH.
 Describe conditions and large air leakages: TRAP door AREA.

Number of occupants: 4 Other MVG adjustments
 Number of smokers: 1 Total MVG adjustment 1750
 POST TEST at CFM50: 3501 Tester: REC

Describe minor air sealing performed: base boards, window + door frames, entrance doors
Trap door/ energy Guardian

This section is to be performed after all weatherization work is completed

Chimney safety test: Outside Temp. 90 Exhaust devices activated yes
 Furnace fan activated: yes ☐ no ☐ n/a ☒ Spillage: Heater no other: no
 Draft(iwc/pascals): Primary Heater 05 DHW ☐ Other ☐

Are there any negative pressure exist in the area of the combustion appliance zone while a forced air distribution system fan is operating. Yes ☐ No ☒

COMMENTS: Boiler

MBD MODEL 3

9/12/02

RODGERS

525 11TH AVE PRO

AREA= 2325ft²VOLUME= 15200ft³

NUMBER OF STORIES = 2.0

WIND FACTOR = 1.0

TEST DONE BY:

CREW

T IN= 72F T OUT= 68F

PH	PI	CFM	%Error
60	72	4047	0
50	55	3542	1
54	60	3693	-0
47	48	3312	-0

CORR. COEF. = 0.995

C= 159.59 n= 0.791

LEAKAGE AREAS:

Effective L.A. (LBL)=

134.61sq in

Equivalent L.A. (Can.)=

287.88sq in

MPLS LEAKAGE RATIO= 1.50

cfm50 / sq ft

CFM50 = 3501

AC/H50 = 13.82 AC/H

ESTIMATED NATURAL INFIL:

= CFM50 / 14.3

= 243 CFM

= 0.961 AC/H

= 60.9 CFM/PERSON

HOUSE PRESSURE

4Pa 10Pa 50Pa

CFM 474 980 3501

ST ERR % 14.1 9.1 0.6

=====

MBD MODEL 5

9/12/02

RODGERS

525 11TH AVE PRO

AREA= 2325ft²VOLUME= 15200ft³

NUMBER OF STORIES = 2.0

WIND FACTOR = 1.0

TEST DONE BY:

CREW

T IN= 72F T OUT= 68F

PH	PI	CFM	%Error
50	105	4877	-1
43	95	4593	2
39	75	4130	-1
34	64	3018	-0

CORR. COEF. = 0.982

C= 385.91 n= 0.652

LEAKAGE AREAS:

Effective L.A. (LBL)=

268.95sq in

Equivalent L.A. (Can.)=

586.64sq in

MPLS LEAKAGE RATIO= 2.12

cfm50 / sq ft

CFM50 = 4931

AC/H50 = 19.46 AC/H

ESTIMATED NATURAL INFIL:

= CFM50 / 14.3

= 343 CFM

= 1.354 AC/H

= 85.7 CFM/PERSON

HOUSE PRESSURE

4Pa 10Pa 50Pa

CFM 948 1725 4931

ST ERR % 20.7 12.7 1.9

Home Performance with ENERGY STAR

HOT WATER SYSTEMS

(Check all that apply)

Primary DHW Fuel: ☒ Natural Gas ☐ Oil ☐ Propane ☐ Electric ☐ Wood ☐ Other

DHW Type: ☐ Indirect ☒ Tank-Standard ☐ Tank-High Efficiency ☐ Tankless ☐ Tankless w/backup
☐ Heat pump ☐ On Demand ☐ Other Age: 2001 Yrs.

Condition: ☒ Good ☐ Fair ☐ Poor Tank Size: 40 gal.

Tank Location: ☒ Basement ☐ Living Space ☐ Attic ☐ Other

Outer Jacket of Insulation Existing: ☐ Yes ☒ No

REPLACE TANK: ☒ Yes ☐ No New Tank Efficiency (EF Rating): 61 %

Secondary DHW Fuel: ☐ Natural Gas ☐ Oil ☐ Propane ☐ Electric ☐ Wood ☐ Other

DHW Type: ☐ Indirect ☐ Tank-Standard ☐ Tank-High Efficiency ☐ Tankless ☐ Tankless w/backup
☐ Heat pump ☐ On Demand ☐ Other Age: Yrs.

Condition: ☐ Good ☐ Fair ☐ Poor Tank Size: gal. Outer Jacket of Insulation Existing: ☐ Yes ☐ No

Tank Location: ☐ Basement ☐ Living Space ☐ Attic ☐ Other

REPLACE TANK: ☐ Yes ☐ No New Tank Efficiency (EF Rating): %

NOTES:

ATTENTION 6-61-40 540-3NW

AIRSEALING

(Check all that apply)

Choose "N" Factor (1 - 20) for the region (lower number indicates a more severe climate).
Multiply by "Building Envelope Correction Factor" below, or less: (1 story = 1 / 1.5 story = 1.5 / 2 story = 2 / 2.5 story = 2.5 / 3 story = 3) to determine "Adjusted N Factor" (number is always 20 or lower)

OCCUPANT BAS = Number of occupants X 15 (cfm) X "Adjusted N Factor"

Building Airtightness Standard (BAS): 2486 cfm50

House Pressure: 5.0 Pascals Fan Pressure: 192 Pascals Fan Ring: ☒ Open ☐ B ☐ C

Inside Temp. 65 Outside Temp. 36 F Building Leakage: 2486 cfm50

Proposed Air Sealing Days: ☐ 15 ☐ 50 ☐ 75 ☐ 1.0 ☐ 1.25 ☐ 1.5 ☐ 1.75 ☐ 2.0 ☐ Other

Air Sealing Locations: ☒ Attic ☒ Basement / Crawl ☐ Living Space ☐ Other

Notes:

Before

18V15 x 3 =

3.5

2486

36

1.5

2486

2486

2486

2486

2486

2486

2486

2486

2486

2486

2486

MR. Renaudin

Post-Installation Test Data

Blower Door Test:

Test Date:

3/17/04

MVG: 977 CFMSD -3.5
House Pressure: 50 (Pascals) Fan Pressure: 45 (Pascals) Fan Ring: ? Open (A) 1.0 °C
Inside Temp. 72° Outside Temp. 38° F Building Leakage: 1150 CFMSD

Combustion Safety Test:

Test Date:

Venting Type: Atmospheric or Natural = N Induced = I Power Vent = P Direct Vent = D
CO Ambient (max) In Living Space: 0 PPM // CO Ambient (max) In CAZ (during test) 0 PPM
Combustion Appliance Zone (CAZ) Base Pressure: -1.5 Pa. / Worst Case Pressure: -2.3 Pa.

Appliance Type	Venting Type (N/I/P/D)	Draft (Pascals)	Spillage (Worst Case)	Spillage/ (Natural)	CO (Worst Case)	CO (Natural)
Heating System	N-I/P/D	-1.5 Pa.	Pass/Fail	Pass/Fail	43/35 PPM	PPM
Water Heater	N-I/P/D	1.0 Pa.	Pass/Fail	Pass/Fail	43/35 PPM	PPM
Gas Oven	N-I/P/D	Pa.	Pass/Fail	Pass/Fail	32 PPM	PPM
	N-I/P/D	Pa.	Pass/Fail	Pass/Fail	PPM	PPM
	N-I/P/D	Pa.	Pass/Fail	Pass/Fail	PPM	PPM

Warranty

Dealer/Contractor warrants that the work and the equipment furnished in this installation job comply with the requirements as outlined in the Contractor Participation Agreement with Home Performance with ENERGY STAR and, if financed by EFS, in the Contractor Participation Agreement with EFS. In the event that any defect in workmanship or equipment is discovered within one (1) year after payment authorization, the Dealer/Contractor will remedy, repair, correct or cause to be remedied, repaired, corrected or replaced at Dealer/Contractor's expense such defect in equipment or workmanship. The foregoing warranty survives any inspection Home Performance with ENERGY STAR or if financed by EFS, that EFS may elect to make.

Lien Waiver

Dealer/Contractor hereby waives and releases any and all lien or claim of, or right, to lien, under laws relating to mechanics liens with respect to and on the property referenced above.

Customer Statement

The undersigned hereby certify personal ownership of the home specified above, that all materials and equipment included in the construction contract (work order, job order, bid summary, proposal, invoice, etc.) have been furnished and installed, and that the work has been completed and I am satisfied with work. In addition, if this job was financed by EFS, we hereby certify that we have not obtained the benefits of and will not receive any cash payment, rebate, cash bonus, sales commission, or anything from the contractor as inducement to enter into the EFS Loan Agreement. If this job was financed by EFS, we also agree to the terms specified in the Loan Agreement and authorize payment to the above Dealer/Contractor.

3/17/04
Date

Read the above statements before signing.
X Mark Renaudin
Customer Signature

3/17/04
Date

Clover Heating & Cooling
Dealer/Contractor Business Name

Dealer/Contractor Signature

Exhibit Q

Tompkins Community Action

EARLY CHILDHOOD ~ ENERGY SERVICES ~ FAMILY RESOURCES ~ HOUSING

James Melesky
President
ESS Energy Products, Inc.
P.O. Box 400
Paoli, PA 19301

August 25, 2006

Dear Jim:

I want to let you know that we are very pleased with *The Energy Guardian*™ Kits. We use them primarily for push up hatches since that is what the majority of our homes have, but we also use your other kits as well. Overall, they are very effective for our clients and serve as an important efficiency tool for our operations.

Everyone in the weatherization business knows that the attic access is an important part of the thermal barrier of the home. Without a proper mitigating measure, it is a major source of energy loss.

Before we found *The Energy Guardian* Kits, we used foam board and weather-stripping to seal up the accesses. While it was an improvement over the existing conditions, it didn't come close to solving the problem like your kits. We've looked at other products over the years, but none of them met our standards. Some didn't have the high R-Value we were looking for. Others were flimsy. Some didn't look like they were "homeowner-friendly".

Like all of our upgrades, we need to cost-justify improvements to the attic access. It is essential that any measure will produce energy savings for many years. Your products easily meet our thresholds because of four major factors. First, you have a high R-value which is a major improvement over what is already there. Second, the air-sealing qualities of your kits are great. The extended warranty gives us the confidence that the improvement will last and our savings projections will be accurate. My crews really appreciate spending less time in the attic as it takes less time to install the kit than make our own solution.

Finally, it's lightweight and easy for the customer to use when they enter the attic. In fact, ease of use might be an easily overlooked feature. If the upgrade is too difficult to use, it will not remain in the home for long after we leave. Because the lid of your kits fits right into the frame without any hooks or other devices to secure the air seal, it is practical and straightforward for the homeowner. Your kits solve this problem like no other solution that my organization has built, bought or otherwise seen available in the market.

ESS has also been a great partner. All of our dealings with your company have been positive, and your staff makes sure that we get the proper attention and that our order is processed correctly.

Thanks for a great solution to a major problem. I'd be happy to be a reference for the effectiveness of *The Energy Guardian* Kits. I believe that your kits set the standards for any other agency or contractor that weatherizes homes.

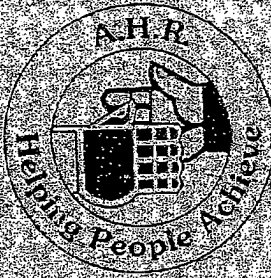
Yours truly,



Fran Rice
Energy Services Coordinator
Tompkins Community Action

701 Spencer Road, Ithaca, NY 14850 ~ Phone: 607/273-8816 ~ Fax: 607/273-3293

Exhibit R



ATLANTIC HUMAN RESOURCES, INC.

WEATHERIZATION PROGRAM
ONE SOUTH NEW YORK AVENUE, SUITE 308
ATLANTIC CITY, NEW JERSEY 08401-8012
Phone: (609) 348-4489
FAX: (609) 348-5578

JOSEPH E. GAYNER
Executive Director

March 27, 2007

James Melesky
President
ESS Energy Products, Inc.
P.O. Box 400
Pahoa, PA 19301

Dear Jim

This agency has now been using your product for a couple of years. I want to share with you how pleased we are with your kits and the difference it has made to our program.

Our agency is dedicated to help as many low income families as possible so I am always in search of more efficient and high quality alternatives for our program. This gives us the opportunity to upgrade more homes and provide them with increased energy savings. Your kits give us an advantage in both areas.

Before we started using The Energy Guardian Kits, our agency built our own upgrades for attic entrances. Installing your kit is fast and easy so it is much more efficient for us to use your kits than build an upgrade. Our inspectors' time can now be spent on other areas of the house.

The heavy duty air seal is a big step up from the old weather stripping method we used to use. We know that weather stripping can't match the one created by the lid sliding into a frame of your kits. That also takes away a risk of mold that can easily occur when the glue on weather stripping fails.

It has also helped our inspectors, they know that the job's been done right. Since we started using The Energy Guardian Kit, call backs and re-inspections are a thing of the past for attic entrances.

The kits are also great for homeowners. They're much lighter and are exceptionally durable, as proven by your 20-year warranty. This also makes them very cost-effective since we know that the improvement will last and continue to save money year after year.

We're also very glad to be working with ESS. Your company has always kept in touch with us to know what our needs would be, and you've kept us up to date with the latest training and tips to make our jobs easier.

Your kits solve a difficult problem in homes and are part of our standard solution. At the same time, ESS has been a great partner for our program. I look forward to continuing our relationship for years to come.

Yours truly,



Marlene W. Barbour

Weatherization Manager

Exhibit S

----- Original Message -----

From: Jan Vallado

To: 'ESS Info'

Sent: Wednesday, June 08, 2005 12:41 PM

Subject: RE: Attic Stair Cover

You have ESP they just came to my house this morning and installed the unit. IT'S AMAZING the difference was instant. It is very hot and humid here today. As soon as they got it up and we closed it you could immediately feel the cool air. I also noticed that when I opened my laundry room door to the garage I did not have an "in flush" of air rushing in. They wanted me to tell you it's the first one they've done. It took them a while because of my attic layout and some wiring cords in the way but they got it done and they said it was really easy. They read up on the video or training info yesterday and went right to it.

I can't wait to see the difference in my utility bills. I must have been pouring air and heat out my roof through that attic hatch. Why would they put it inside the house and not in the garage is beyond me but who am I.

I'm thrilled with your product I'm so glad I went with yours instead of the battic door I was considering. You pay for what you get as the old saying goes !!!!!

Jan Vallado
Jim Hughes Co
972-221-1536 ph
972-221-1537 fx
www.jimhughesco.com

-----Original Message-----

From: ESS Info [mailto:info@essnrg.com]

Sent: Wednesday, June 08, 2005 8:54 AM

To: Jan Vallado

Subject: Re: Attic Stair Cover

Jan:

I am glad that you arranged to have the unit installed by Mr. HAndyman. Please give me your feedback on the installation. We now have a toll free number if you would like to call. 1-877-ESS-4NRG.

Regards,

Jim

----- Original Message -----

From: Jan Vallado

To: info@energysentrysolutions.com

Sent: Wednesday, June 01, 2005 11:22 AM

Subject: Attic Stair Cover

Hi,

I ordered this last week I was wondering if you could give me the waybill/tracking # for the shipment. I called Mr. Handyman locally and have someone coming out on the 8th to install it. Should arrive this week I would think.

Thank you,
Jan Vallado
2019 Highland Forest Drive
Highland Village, TX 75077
972-221-1536 work
972-317-5474 home

Exhibit T

----- Original Message -----

From: Donovan, Jim G

To: 'James Melesky'

Sent: Thursday, December 22, 2005 1:20 PM

Subject: 6 PM Ratings

Hi Jim,

I took a look at our ratings for yesterday. We had a 4.7 rating when the story aired, that translates roughly into 139,000 viewers.

I'll try to get in touch with my CN8 contact for you next week.

Happy Holidays!

Jim Donovan

Exhibit U

----- Original Message -----

From: Amy Bader

To: jmelesky@energysentrysolutions.com

Sent: Thursday, November 20, 2003 11:12 AM

Subject: order

Hello,

I'd like to order the attic insulating door. I heard of your product from family in Pennsylvania -- I formerly lived in West Chester, but have recently relocated to Buffalo, New York.

My attic opening is 27 1/4 inches wide, 56 1/2 inches long and the ladder is approximately 7 inches above the attic floor (I measured the depth of the folded ladder minus the recess of the opening).

Please let me know what further information you need and how you prefer to arrange payment. Thank you,

Amy Bader

305 Pilgrim Rd.

Tonawanda, NY 14150

amybadervmd@yahoo.com

Exhibit V

----- Original Message -----

From: [John Ohm](#)

To: [Jim](#)

Sent: Wednesday, July 16, 2003 4:47 PM

Subject: Fw: The Energy Guardian

----- Original Message -----

From: [John Ohm](#)

To: [Melenchek, Linda M](#) ; [jagrant@pplweb.com](#) ; [dthomas@gpu.com](#) ; [Land, Jane H](#)

Cc: [tsterner@supernet.com](#) ; [Rivera, Rosa](#) ; [Richard](#) ; [Patchday@aol.com](#) ; [ohmwx@yahoo.com](#) ; [Jack](#) ; [Tamasin Sterner](#)

Sent: Wednesday, July 16, 2003 4:05 PM

Subject: The Energy Guardian

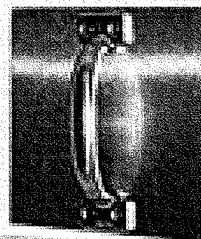
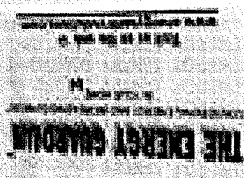
Hi,

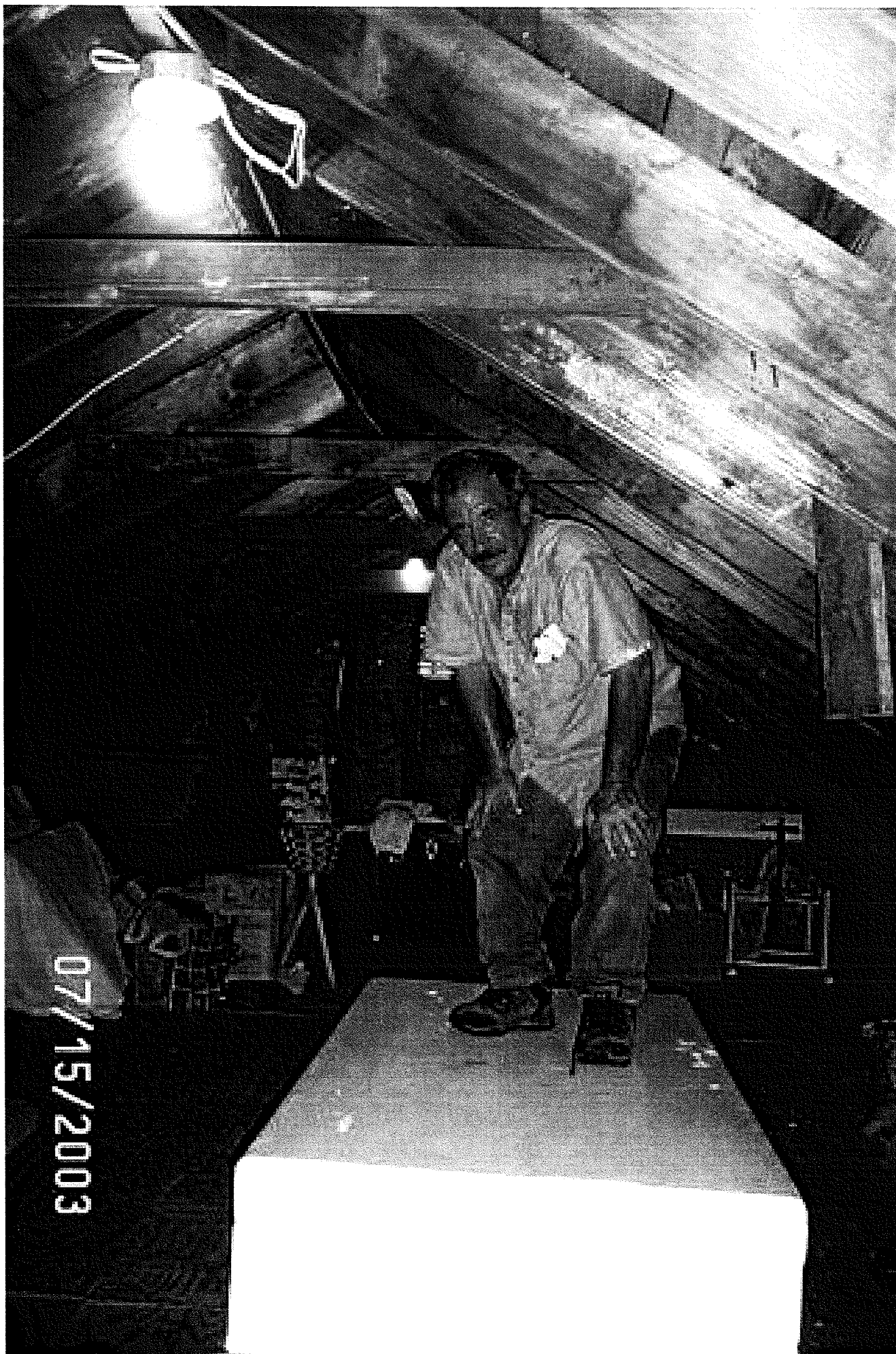
We have just installed our 1st hatch from The Energy Guardian. This was the time I ever installed one of these units and found it was very simple to do. I am one of those people that reads directions as a last resort. This hatch proved to be so easy that I was able to install it without reading the directions. The whole process took me about 15 minutes. Working in this attic was a little on the warm side at around 140 degrees. I took a number of pictures that have been included in this email. The 2 of most interest to me were the ones with the IR camera before and after. The home was being cooled with the A/C unit and was at around 80 degrees. That puts the temp differential between the attic and the home at a difference of 60 degrees. The before shot shows this very well. After the hatch was installed the finish shot had a small temp difference with the pull down stairs. I was concerned about the strength of this hatch so I found an Elderly Gentleman, that was carrying a few extra pounds to stand on this hatch. As that picture shows he was a little careful about where he stood and stayed close to the end.

Jack was a good sport helping on this installation from CACLV. I thought I would pass this on.

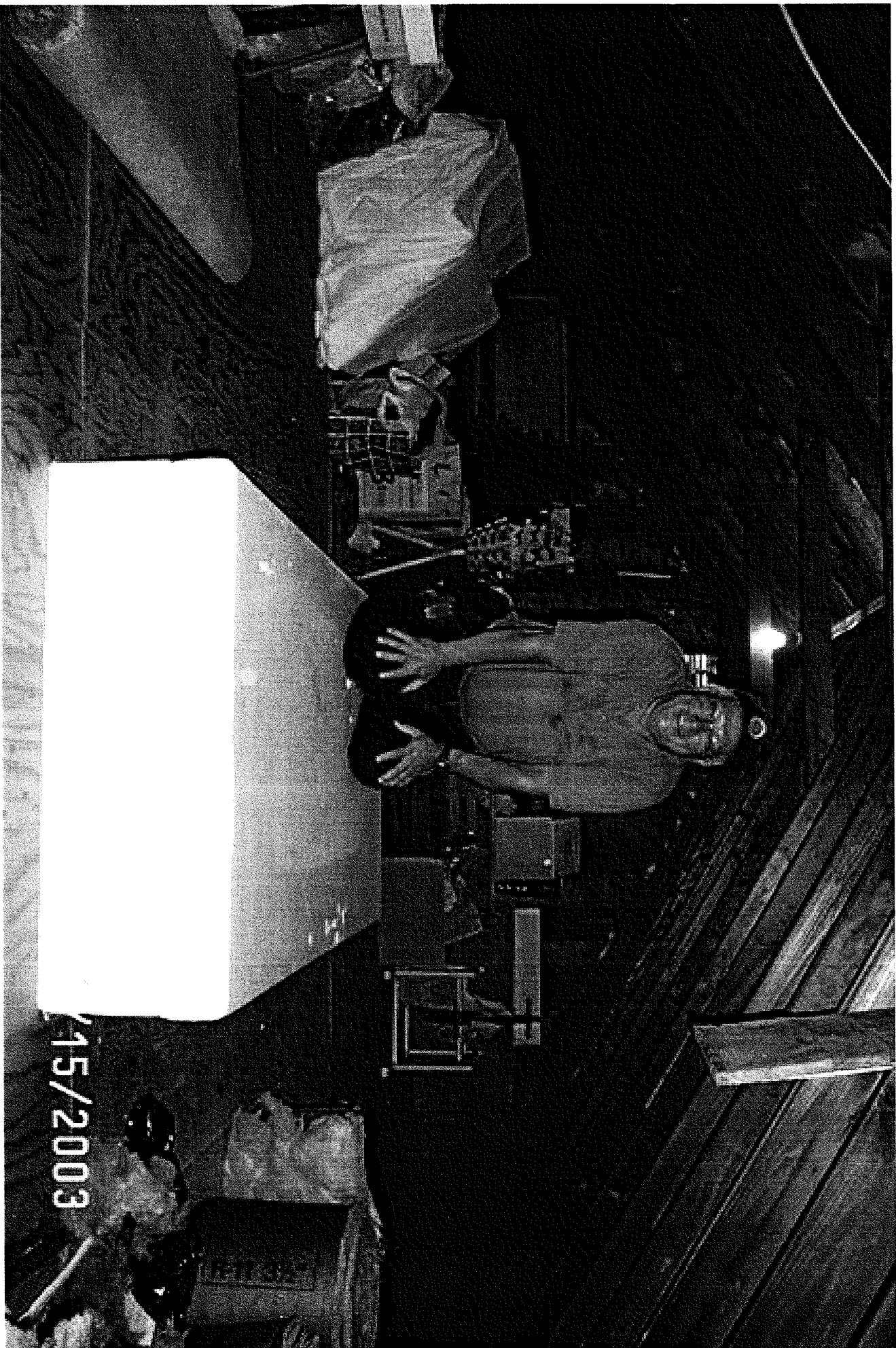
John

07/15/2003





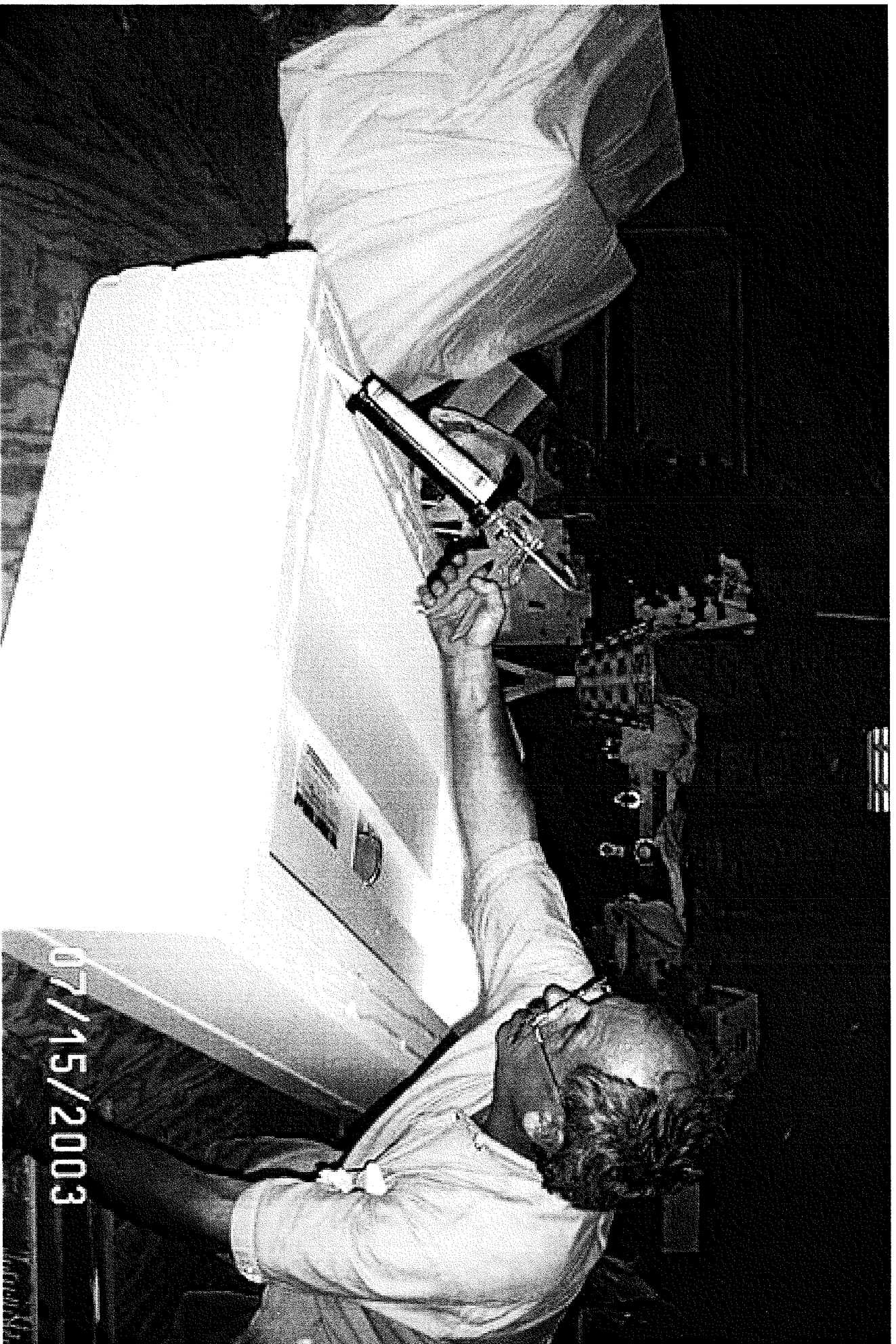
07/15/2003



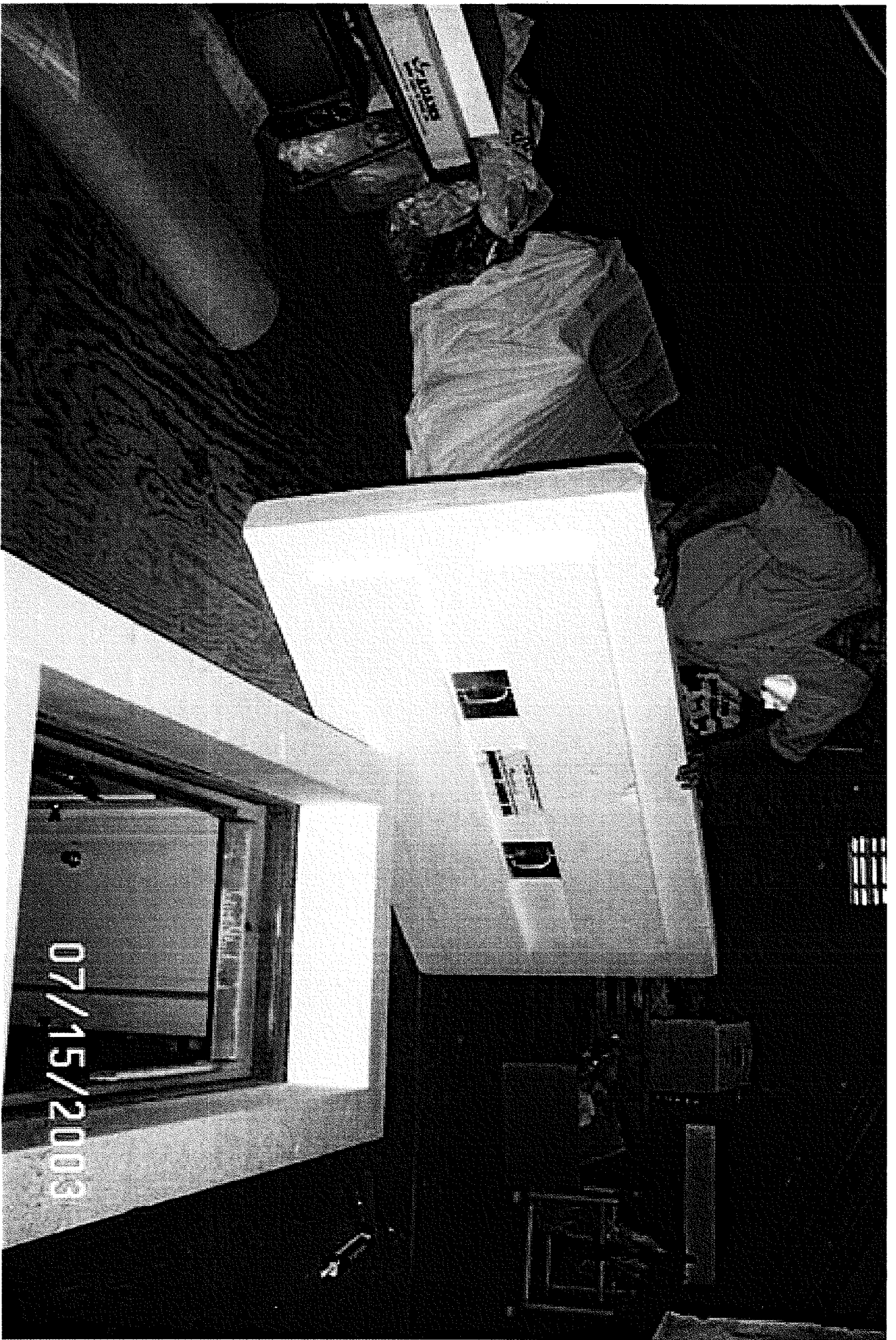
15/2003



07/15/2003

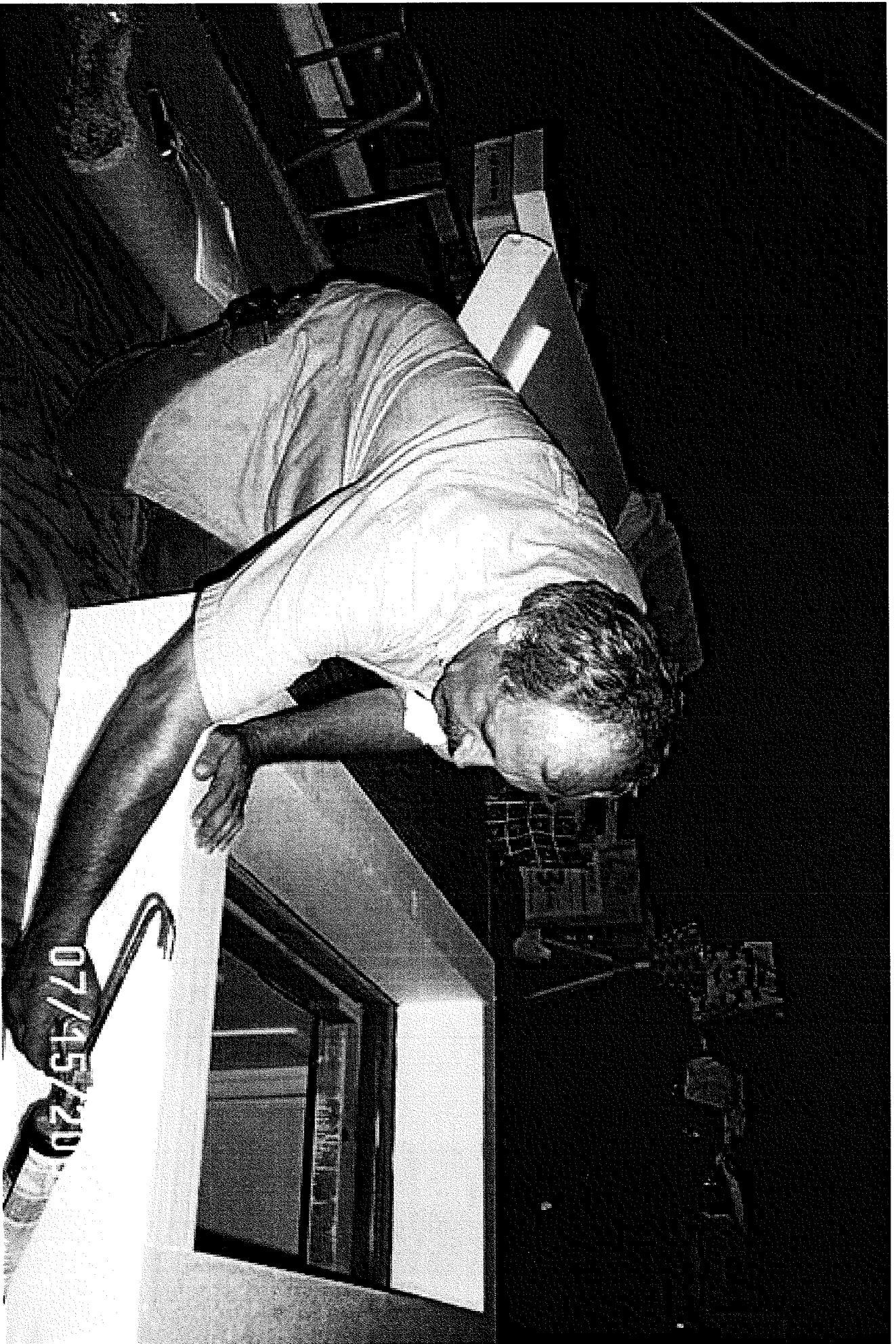


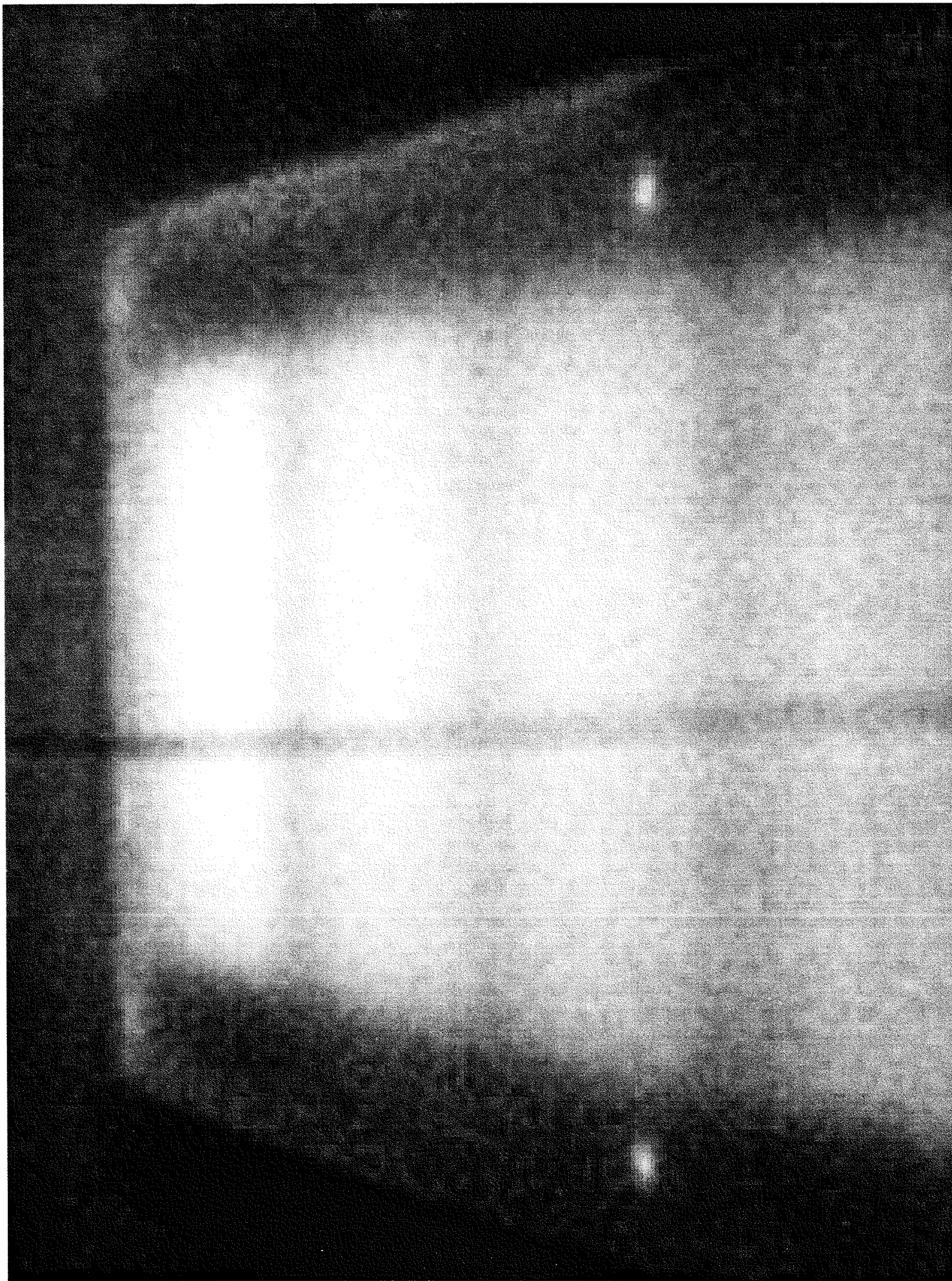
07/15/2003



07/15/2003







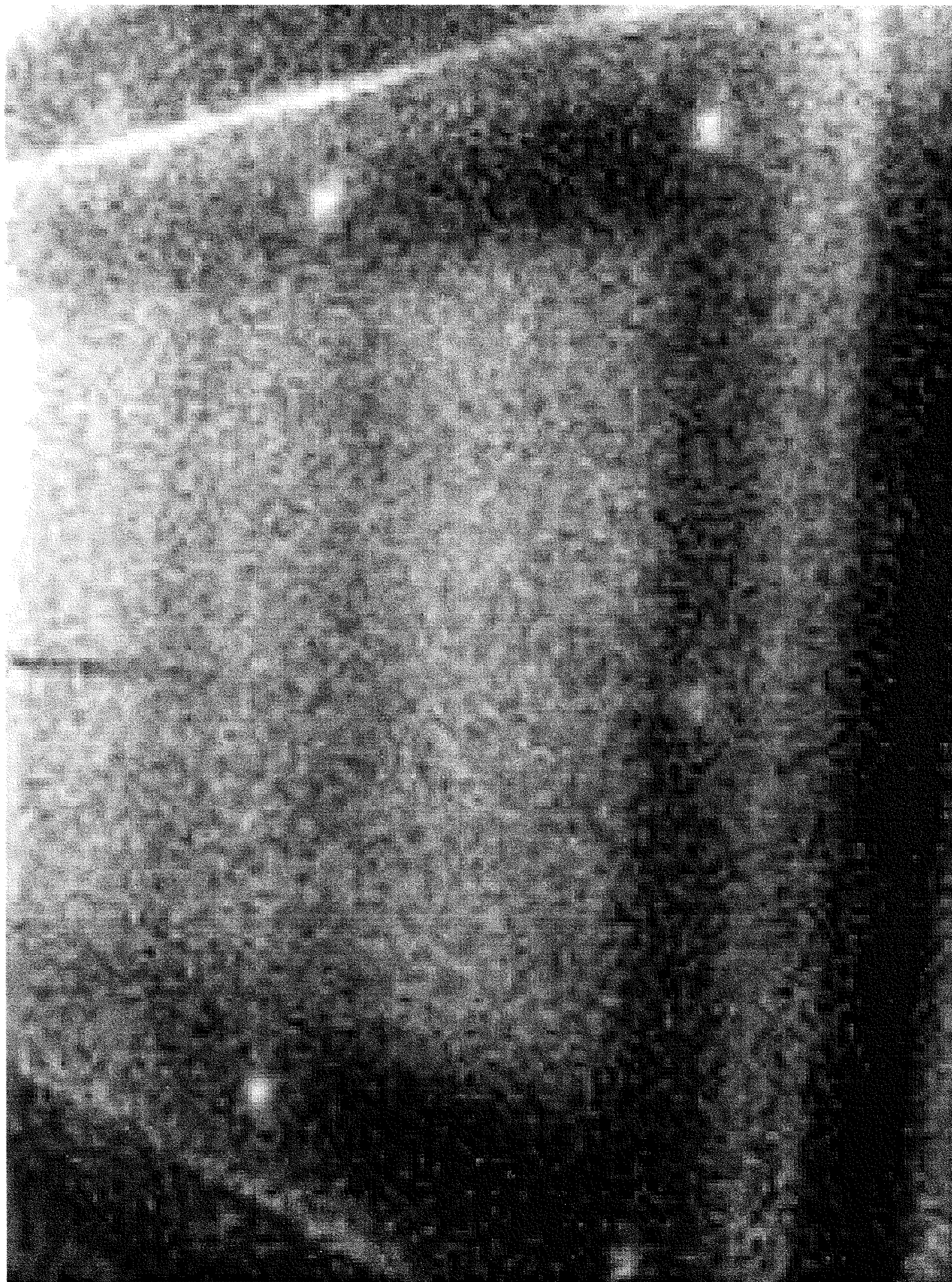


Exhibit W

----- Original Message -----

From: Rocket19335@aol.com

To: jmelesky@energysentrysolutions.com

Sent: Friday, January 09, 2004 6:43 PM

Subject: (no subject)

hi jim. i wanted to send a note of thanks for the work you and your son did for us.

we have seen a big difference in the warmth of our bedroom since the attic insulator was installed. i have not been able to determine the money savings yet due to the strange weather we've been having, but just to be warmer is great! i did talk to gretchen metz this week. i told her how happy we are with your product and services and i thanked her for running the story about your products. she sounded quite interested in trying it out herself. one last note, i found a kind of flashlight snake light hanging in the attic. i guess it is yours. so, if you're missing one it's here.

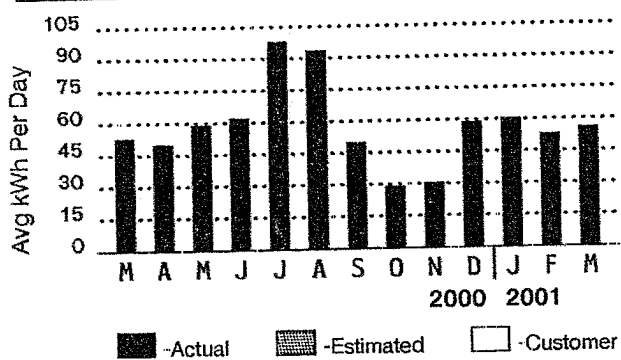
thanks again for your help, sandie stanzione

Exhibit X

Your Electric Use Pattern

Average kWh per month 1,823.7
 Total Annual kWh 21,885.0

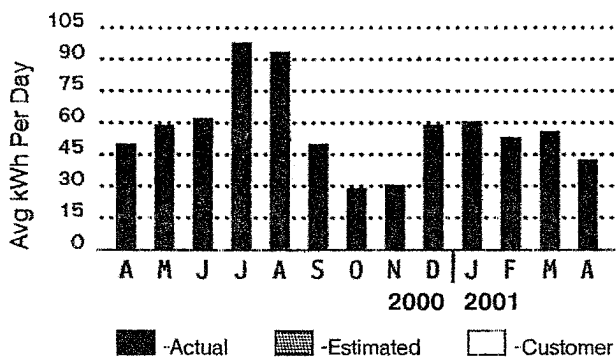
	Last Year	This Year
kWh per day	54.6	56.3
Meter Reading	Actual	Actual
Average Temperature	47°	40°



Your Electric Use Pattern

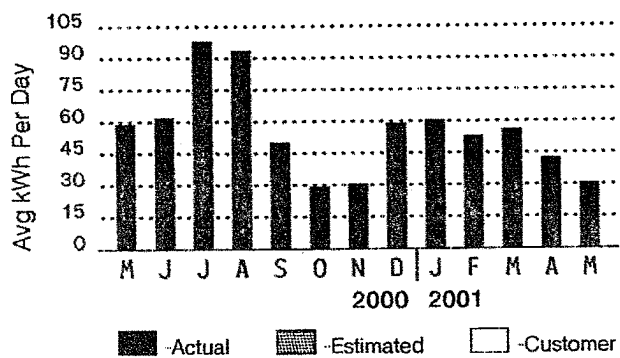
Average kWh per month 1,813.5
Total Annual kWh 21,762.0

	Last Year	This Year
kWh per day	50.4	43.4
Meter Reading	Actual	Actual
Average Temperature	52°	50°



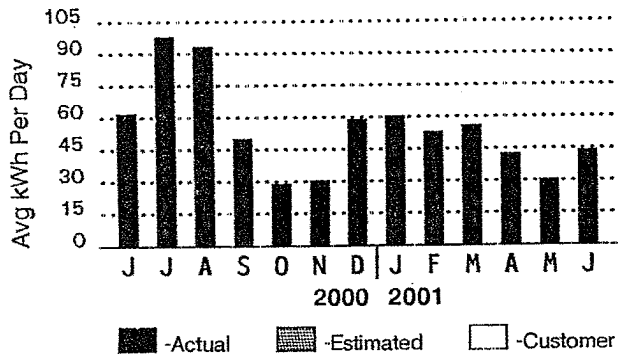
Your Electric Use Pattern

Average kWh per month	1,726.7	
Total Annual kWh	20,721.0	
	Last Year	This Year
kWh per day	60.0	31.4
Meter Reading	Actual	Actual
Average Temperature	61°	63°



PECD31

Average kWh per month	1,685.6	
Total Annual kWh	20,228.0	
	Last Year	This Year
kWh per day	63.6	45.1
Meter Reading	Actual	Actual
Average Temperature	68°	70°

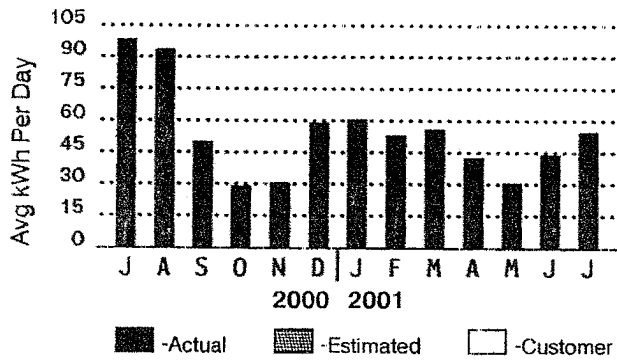


PECD31

Your Electric Use Pattern

Average kWh per month 1,581.9
 Total Annual kWh 18,983.0

	Last Year	This Year
kWh per day	99.2	55.5
Meter Reading	Actual	Actual
Average Temperature	75°	76°

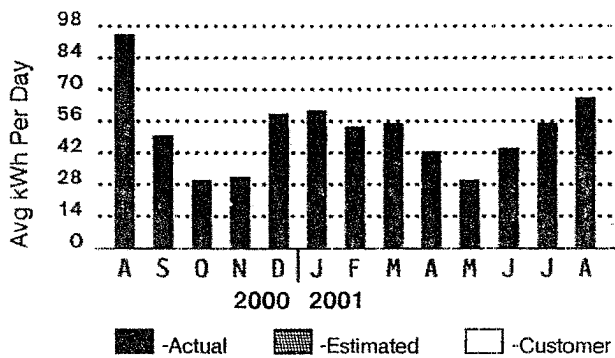


Your Electric Use Pattern

Average kWh per month 1,493.0

Total Annual kWh 17,917.0

	Last Year	This Year
kWh per day	94.7	67.7
Meter Reading	Actual	Actual
Average Temperature	74°	78°



PECD31

Exhibit Y

----- Original Message -----

From: Wayne Raffety

To: Jim Melesky

Sent: Sunday, December 21, 2003 3:57 PM

Jim,

It has been a year since you installed our Energy Guardian. The comparison is still very difficult because we still do not have a year to year comparison and there was a big difference between last winter and this so far. There is no question, however, about whether it is effective. As a matter of fact, we are probably going to have to reinsulate the middle level of our split level house because the heat now does not escape the upstairs and the thermostat is on the middle level, so the furnace heats for the lowest common denominator.

We are very satisfied with the Energy Guardian and you can quote me if you wish. Hope all is well with you and your family and your business. Happy Holidays!

Wayne Raffety

Exhibit Z

----- Original Message -----

From: Dan Pourreau

To: jmelesky@energysentrysolutions.com

Sent: Friday, February 13, 2004 9:24 AM

Subject: Energy Guardian Savings

Hi Jim,

My January 2004 bill is attached and shows a 0.8 Ccf/day reduction in gas usage vs last January despite a lower average temperature and the fact we finished our basement in July.

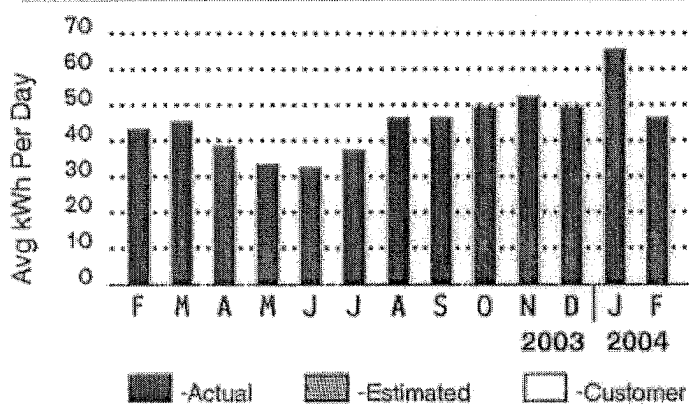
Since we are now heating 1/3 more space than last year, I estimate we saved at least \$ 189.65 in January by installing the Guardian. I added foam insulation to provide an air-tight seal between the floor and the guardian.

Regards,

Dan

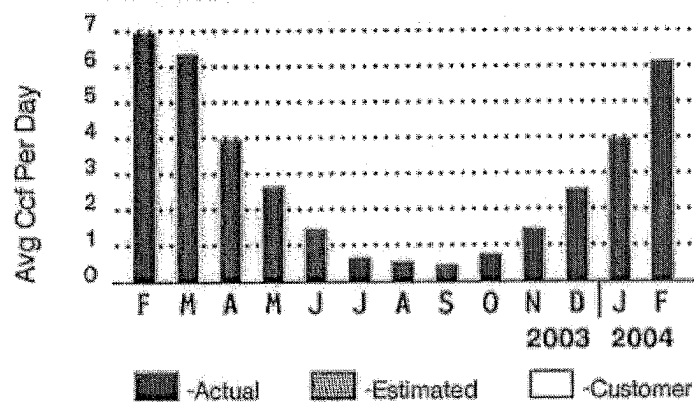
Your Electric Use Pattern

Average kWh per month	1,400.0	
Total Annual kWh	16,801.0	
	Last Year	This Year
kWh per day	43.6	46.9
Meter Reading	Actual	Actual
Average Temperature	28°	24°



Your Gas Use Pattern

Average Ccf per month	80.5	
Total Annual Ccf	967.0	
	Last Year	This Year
Ccf per day	7.0	6.2
Meter Reading	Actual	Actual
Average Temperature	28°	24°



PECD35

Exhibit AA

----- Original Message -----

From: Brian Dietrich, CIC

To: jmelesky@energysentrysolutions.com

Sent: Monday, December 08, 2003 11:59 AM

Subject: Big Thanks

Dear Jim:

Big Thanks to you and your son Kevin for coming out to assist me with my "Energy Guardian" insulation "Cap" on Sunday! You were so thoughtful in helping me out.

It has already noticeably improved my heat loss from the attic access door. I completed the caulking and installation yesterday- and it has made a HUGE difference already!

Thanks again, Brian

Brian J. Dietrich, CIC

Asst. Vice President

M. F. Irvine & Associates, Inc.

t: 610 834-8866 x 204

f: 610 834-1955

e: bdietrich@irvineandassociates.com

Exhibit BB

----- Original Message -----

From: "Brian Dietrich, CIC" <bdietrich@irvineandassociates.com>
To: <jmelesky@energysentrysolutions.com>
Sent: Wednesday, December 10, 2003 10:57 AM
Subject: RE: Big Thanks

> Jim:

>

> Attached is my testimonial note.

>

> Also, when you were at our house you left your tape measurer. Please
> let me know when you would like to pick it up, or if you would like me
> to drop it off somewhere for you.

>

> Thanks, Brian

>

> -----

> Brian J. Dietrich, CIC

> Asst. Vice President

> M. F. Irvine & Associates, Inc.

>

> t: 610 834-8866 x 204

> f: 610 834-1955

> e: bdietrich@irvineandassociates.com

>

>

>

>

>

> -----Original Message-----

> From: jmelesky@energysentrysolutions.com

> [mailto:jmelesky@energysentrysolutions.com]

> Sent: Tuesday, December 09, 2003 2:08 PM

> To: Brian Dietrich, CIC

> Subject: Re: Big Thanks

>

> Brian:

> If you could make a short note to me regarding the effectiveness of
> the product and give Dusty a copy for his use, it would be most
> helpful. Many people who look at an ad are reassured when a real
> person shares an experience.

> Regards,

> Jim

> On Mon, 8 Dec 2003 10:59:13 -0500, "Brian Dietrich, CIC"

> <bdietrich@irvineandassociates.com> wrote :

>

>> Dear Jim:

>>

>> Big Thanks to you and your son Kevin for coming out to assist me

> with my
>> "Energy Guardian" insulation "Cap" on Sunday! You were so
> thoughtful
>> in helping me out.
>>
>> It has already noticeably improved my heat loss from the attic
> access
>> door. I completed the caulking and installation yesterday- and it
> has
>> made a HUGE difference already!
>>
>> Thanks again, Brian
>>
>>
>>
>> -----
>> Brian J. Dietrich, CIC
>> Asst. Vice President
>> M. F. Irvine & Associates, Inc.
>>
>> t: 610 834-8866 x 204
>> f: 610 834-1955
>> e: bdietrich@irvineandassociates.com
>>
>>
>>
>>
>>
>

Dear Jim:

My family and I have enjoyed a more comfortable house since having the "Energy Guardian" installed last weekend. We can really tell the difference in our second floor, that is now a few degrees warmer! What a HUGE difference it has made!

Thanks again for your help with fitting this "Cap" in on Sunday!

Thanks again, Brian

Exhibit CC

----- Original Message -----

From: Jerry

To: jmelesky@energysentrysolutions.com

Sent: Monday, October 20, 2003 9:28 AM

Subject: Energy Guardian Works Great!

Hi Jim,

Well, we got the Energy Guardian installed on Saturday. It looks great and more importantly...it works! I need you to email me an invoice for the Energy Guardian. (Seems like you told me \$125.) And, I still haven't received your signed copy of the release form that we had discussed. (Maybe it got lost between our fax machines.) If you've already faxed it, please fax again since I haven't received it yet. Keep care & Have a Great Monday!

Linda Copeland

Progressive Energy Solutions, Inc.

Phone: 704.825.5553

Fax: 704.825.5554

Exhibit DD

----- Original Message -----

From: "Stell, Jeffery A" <Jeffery.Stell@unisys.com>
To: <jmelesky@energysentrysolutions.com>
Sent: Wednesday, December 03, 2003 10:10 AM
Subject: RE: RE: RE: Pull Down Ladder Info Request

> Hey Jim,
>
> I just wanted to touch base with some feedback. The installation went
> smoothly. I ended up needing to put an inch "foundation" around the attic
> entrance, to raise the frame, since my ladder, when the door is closed,
> did
> poke up a little too high for the lid. We haven't received a heating bill
> yet, but I can say with certainty that as soon as I installed the Energy
> Guardian, there was a NOTICEABLE difference in room temperature! Even if
> there aren't tangible energy savings (which I have to believe there will
> be)
> I am very glad we did this, just to make my daughter's room warmer at
> night.
> It's a great product. The only concern I can honestly relate is that
> because of the material involved, I'm a little worried we will damage the
> frame (or lid) someday when moving stuff in/out of the attic. But that is
> something we will have to just be careful about. Again, I'm really glad
> we
> did this, and Gail told me that you were very courteous and professional
> when you delivered the product, as you were during our e-mail
> conversations.
> I will definitely recommend the Energy Guardian to my friends.
>
> Regards,
>
> Jeff
>

Exhibit EE

*Comfort Company
416 Wildwood Rd.
Washington CH, Oh 43160
(740) 335-3852*

May 11, 2007

Mr. James Melesky
President
ESS Energy Products, Inc.
P.O. Box 400
Paoli, PA 19301

Dear Mr. Melesky:

The purpose of this letter is to clarify the results that I have experienced with your products. For over 25 years, I have worked in the residential energy conservation business. I have worked as a builder, HVAC contractor and renovated existing homes. My experience has allowed me to be a frequently requested trainer for other weatherization professionals. As you know, I am often a featured speaker at national conferences and I am intimately involved with the Department of Energy's nation Weatherization Assistance Program. I have also worked with Oak Ridge Laboratories scientists to test and evaluate numerous measures that conserve energy.

During training sessions, a major component of the time is devoted to implantation of the measures presented in class. We utilize your kits for insulating and sealing both attic push up hatches and pull down ladders. Once the measures are completed, we test the results in accordance with the strict methodology required by the Department of Energy, ENERGY STAR® and the U.S. Weatherization Assistance Program. These independent tests by numerous third party agencies prove that your kits are a national breakthrough in home energy saving.

Specifically, when we measured the results for *The Energy Guardian® Kits* for both types of attic entrances, they were far greater than any alternative either commercially available or individually constructed. Never in my 25 years of work in the weatherization business have I achieved a zero reading for the smoke stick around an attic entrance, but we get it every time with your kits. We have consistently recorded 200-400 CFM50 reductions for the hatches and 600-900 CFM50 reductions for the pull down ladders. Those results are 3-5 times better than any other measure recorded for alternative measures for these attic entrances.

To be sure, I did not believe that these reductions were attainable. The most respected scientists at Oak Ridge Laboratories as well as revered experts in the field consistently posit that no more than a 50 CFM50 reduction for hatches and a 100-200 CFM50 reduction for pull down ladders are achievable with any kit or constructed measure. I have had a number of occasions where I had to demonstrate the effectiveness of your kits in person to other experts and clients who did not believe that I could substantiate what they deemed were wild claims of effectiveness in this area.

The results are a direct result of the unique design of your kits. The lid with its lip that fits into the frame is the key to the solution.

As homes are built and/or upgraded to be tighter, air sealing the attic entrance is even more crucial to the health and safety of homes. If large amounts of air can move through the attic entrance, it creates a breeding ground for mold- a major health concern. These same air leaks also cause internal home fires to spread faster and are also the primary cause for the use of space

heaters. In a 2006 report from the National Fire Protection Association, space heaters accounted for more than 19,000 injuries requiring emergency room treatment and caused over 25% of all reported home heating fires, resulting in more than \$250 million in property damage. In the new construction and air sealing after market environment of today, your kits are an important health and fire safety measure.

Yours truly,

A handwritten signature in black ink, appearing to read "Vic".

Vic Aleshire
President
Comfort Company

Exhibit FF



January 16, 2006

Mr. James B. Melesky
President
ESS Energy Products, Inc.
P.O. Box 400
Paoli, PA 19301

Dear Jim:

I would like to take a moment to thank you for the recent expertly presented and extremely informative accredited training session that ESS provided to our New Jersey ALPHI members.

All members want to be aware of any item we need to check for homeowners. Learning about the heat transfer caused by the attic entrance and how to check for it fit the bill perfectly.

This was an ideal dual topic for us. The amount of energy loss, the significant cost to homeowners in summer as well as winter and the big affect on their comfort makes this a high priority item for every home inspector. It was important for us to understand how the attic entrance also can cause ice damming and roof damage. Since the attic entrance is near or in the bedrooms, it is easy to realize how it is a major reason for the use of space heaters. I know from the National Fire Protection Association report that space heaters account for many injuries, deaths and costly damage in home heating fires.

Nearly every home in our area has at least one attic entrance, so it is something that warrants careful review in each home.

While understanding a problem is the crucial first step, the segment on the standards for properly solving this heat transfer problem was very valuable. Homeowners need to be aware that a partial solution may only slightly reduce the energy loss problem. Worse still, it can also create other severe problems such as mold. Mold is a problem that home inspectors are keenly aware of and something that every homeowner needs to avoid.

I have reviewed the information regarding *The Energy Guardian® Kits* and many members have seen your products in the field. It is clear from the industry experts, recognition by media consumer reporters and client testimonials that the ESS kits meet and exceed all standards. All homeowners should visit your web page or call for information to learn more about how to best solve the problem.

Thank you and best wishes for success with your business.

Yours truly,

Joseph Wehrhahn
President
NJ-ALPHI

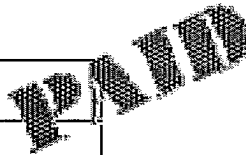


P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
12/18/2006	112297

Bill To
Crawford-Sebatian CDC Mark Whitmer P.O. Box 4069 Fort Smith AR 72914



Ship To
C-SCDC Mark Whitmer 4831 Armour Fort Smith AR 72904

P.O. Number		Terms	Rep	Ship	Via	F.O.B.	Project
1028		Net 30	DGM	12/18/2006	UPS		
Quantity	Item Code	Description				Price Each	Amount
2	BN	The Energy Guardian Standard Hatch Door Model with 2 " Frame					
3	BN	The Energy Guardian Standard Hatch with connectors-2" frame					
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301						Total	



P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
3/8/2007	112412

Bill To	Ship To
Carolina Community Action, Inc. Kevin McCrorwey P.O. Box 933 Rock Hill SC 29731	Carolina Community Action, Inc. Kevin McCrorwey Director 546 South Cherry Street Suite S Rock Hill SC 29730

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
30277	Net 30	DGM	3/8/2007	UPS		
Quantity	Item Code	Description			Price Each	Amount
1	BN	The Energy Guardian Pull Down Model				
1	BN	The Energy Guardian Square Hatch Door Model with 2" Frame				
2	BN	The Energy Guardian Standard Hatch Door Model with 2 " Frame				
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301					Total	

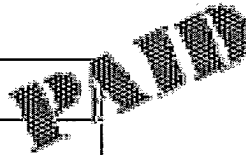


P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
12/8/2006	112271

Bill To
Handy Hands of Aiken Larry B Thomas 1670 Richland Ave. East Aiken, SC 29801



Ship To
Handy Hands of Aiken Larry B Thomas 1670 Richland Ave. East Aiken, SC 29801

P.O. Number		Terms	Rep	Ship	Via	F.O.B.	Project
atl conf		Credit card	DGM	12/8/2006	UPS		
Quantity	Item Code	Description				Price Each	Amount
8	BN	The Energy Guardian Pull Down Model					
1	BN	The Energy Guardian Pull Down Frame					
8	BN	The Energy Guardian Standard Hatch 10 " Frame/with fu's					
4	BN	The Energy Guardian Standard Hatch Door Model with 2 " Frame with jfu's					
Please Provide Credit Card information for payment						Total	



P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
8/10/2006	112083

Bill To
Community Action Agency of TCRCC Bill Anderson P O. Box 278 Talledega, AL 35160

PAID

Ship To
Community Action Agency of TCRCC Bill Anderson 136 North Court St. Talledega, AL 35161

P.O. Number		Terms	Rep	Ship	Via	F.O.B.	Project	
		Net 30	DGM	8/10/2006				
Quantity		Item Code	Description				Price Each	Amount
1		BN	The Energy Guardian Pull Down Model					
1		BN	The Energy Guardian Rectangular Hatch Door Model with 2 " Frame Mw/ handles					
1		BN	The Energy Guardian Rectangular Hatch 10 " Frame Mw/handles					
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301							Total	



P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
11/8/2005	111409

Bill To
CVCAC David Fowler 10 Gable Place Barre, VT 05641

PAID

Ship To
CVCAC David Fowler 10 Gable Place Barre, VT 05641

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
35374			11/8/2005			
Quantity	Item Code	Description			Price Each	Amount
2	BN	The Energy Guardian Pull Down Model				
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301					Total	



P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
1/23/2007	112356

Bill To
West Kentucky Allied Services, Inc. Larry Baldwin P.O. Box 736 Mayfield KY 42066



Ship To
West Kentucky Allied Services, Inc. Larry Baldwin 222 West Water St. Mayfield KY 42066

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
verbal	Net 30	MJM	1/23/2007	UPS		
Quantity	Item Code	Description			Price Each	Amount
1	BN	The Energy Guardian Pull Down Model				
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301					Total	



P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
1/5/2006	111564

Bill To
Tri Valley Opportunity Council Randy Torgeson 102 North Broadway Crookston MN 56716

PAID

Ship To
Tri Valley Opportunity Council Randy Torgeson 102 North Broadway Crookston MN 56716

P.O. Number		Terms	Rep	Ship	Via	F.O.B.	Project
		Net 30	DGM	1/5/2006			
Quantity	Item Code	Description				Price Each	Amount
1	BN	The Energy Guardian Sidewall Model 35x63					
3	BN	The Energy Guardian Sidewall Model 36x36					
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301						Total	

ESSP.O. Box 400
PAOLI, PA 19301**Invoice**

Date	Invoice #
3/14/2007	112420

Bill To
Medlock Construction Marvin Medlock Po. Box 3473 Oak Park, IL 60302 Storefront Delivery

PAOLI

Ship To
Medlock Construction Marvin Medlock 5801 West Chicago Ave. Chicago, IL 60651 Storefront Delivery

P.O. Number		Terms		Rep	Ship	Via	F.O.B.	Project			
V/dgm		Net 30		DGM	3/14/2007	UPS					
Quantity		Item Code		Description				Price Each		Amount	
2		BN		The Energy Guardian Pull Down Model/ with TAPE							
5		BN		The Energy Guardian Standard Hatch 10 " Frame with tape/fu's							
3		BN		The Energy Guardian Square Hatch Door Model with 10" Frame							
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301								Total			

ESSP.O. Box 400
PAOLI, PA 19301**Invoice**

Date	Invoice #
8/15/2006	112099

Bill To	Ship To
Kibois Community Action John Jones P.O. Box 727 Stigler, OK 74462	Kibois Community Action John Jones 301 East Main Street Stigler, OK 74462

PAID

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
7209	Net 30	DGM	8/15/2006	UPS		
Quantity	Item Code	Description			Price Each	Amount
5	BN	The Energy Guardian Rectangular Hatch 10 " Frame JFU's & handles				
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301					Total	

ESSP.O. Box 400
PAOLI, PA 19301**Invoice**

Date	Invoice #
2/26/2007	112405

Bill To
Indiantown Non Profit Housing, Inc. Curtis Boyd P.O. Box 456 Indiantown, FL 34956

PAID

Ship To
Indiantown Non Profit Housing, Inc. Curtis Boyd 15518 Oceola St. Indiantown, FL 34956

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
w	Net 30	DGM	2/26/2007	UPS		
Quantity	Item Code	Description			Price Each	Amount
6	BN	The Energy Guardian Standard Hatch Door Model with 2 " Frame				
2	BN	The Energy Guardian Standard Hatch 10 " Frame				
2	BN	The Energy Guardian Standard Hatch 10 " Frame with JFU's Penna Sales Tax 6.00%				
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301					Total	

ESSP.O. Box 400
PAOLI, PA 19301**Invoice**

Date	Invoice #
3/12/2007	112415

Bill To	Ship To
Mr. Warren Booth Weatherization Assistance Program Housing Authority of Utah County 240 East Center St. Provo, UT 84606	Mr. Warren Booth Weatherization Assistance Program Housing Authority of Utah County 735 S. University Ave. Provo, UT 84601

P.O. Number		Terms	Rep	Ship	Via	F.O.B.	Project	
4973		C.O.D.	DGM	3/12/2007	UPS			
Quantity	Item Code		Description				Price Each	Amount
2	BN		The Energy Guardian Pull Down Model Pull Down Lid ONLY					
2	LO							
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301							Total	



P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
8/28/2006	112112

Bill To
Community Development Authority Tim Clarenbach 109 North Main Street Hartford, WI 53027

PAID

Ship To
Community Development Authority Tim Clarenbach 109 North Main Street Hartford, WI 53027

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
	Net 30	DGM	8/28/2006	UPS		
Quantity	Item Code	Description			Price Each	Amount
3	BN	The Energy Guardian Pull Down Model				
Please Remit Payment To ESS P O. Box 400 Paoli, PA 19301					Total	



P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
10/17/2006	112179

Bill To
NOWCAP Janelle Anderson 1140 Main St. Torrington WY 82240



Ship To
NOWCAP Janelle Anderson 1140 Main St. Torrington WY 82240

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
weatherization	Net 30	DGM	10/17/2006	UPS		
Quantity	Item Code	Description			Price Each	Amount
4	BN	The Energy Guardian Standard Hatch Door Model with 2 " Frame handles & fu's				
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301					Total	

ESS

P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
11/17/2005	111432

Bill To	Ship To
Oakland Livingston Human Service Agency Housing & Energy Department 196 Cesar E. Chavez Ave. P O. Box 430598 Pontiac, MI 48343-0598	Oakland Livingston Human Service Agency Housing & Energy Department 196 Cesar E. Chavez Ave. P.O. Box 430598 Pontiac, MI 48343-0598

P.O. Number		Terms	Rep	Ship	Via	F.O.B.	Project
20092		C.O.D.		11/17/2005			
Quantity	Item Code	Description				Price Each	Amount
2	BN	The Energy Guardian Pull Down Model					
1	WUAP	Walk Up Accessory Pack					
1	BN	The Energy Guardian Sidewall Model 35x63					
1	BN	The Energy Guardian Rectangular Hatch Door Model with 2 " Frame					
1	BN	The Energy Guardian Rectangular Hatch 10 " Frame					
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301						Total	



P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
9/24/2005	111312

Bill To
SCCAP, Inc. Sam Hepner, Jr. Weatherization Program Director 153 N. Stratton St. Gettysburg, PA 17325

PAID

Ship To
SCCAP, Inc. Sam Hepner, Jr. Weatherization Program Director 153 N. Stratton St. Gettysburg, PA 17325

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
12162	Net 30		9/24/2005			
Quantity	Item Code	Description			Price Each	Amount
3	UN	The Energy Guardian Pull Down Model				
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301					Total	

ESSP.O. Box 400
PAOLI, PA 19301**Invoice**

Date	Invoice #
5/9/2007	112461

Bill To
Tompkins Community Action Fran Rice 701 Spencer Rd. Ithaca, NY 14850 T E # 124755

PAID

Ship To
Tompkins Community Action Fran Rice 701 Spencer Rd. Ithaca, NY 14850 T E # 124755

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
0436	Net 30	MJM	5/9/2007	UPS		
Quantity	Item Code	Description			Price Each	Amount
18	BN	The Energy Guardian Square Hatch Door Model with 2" Frame				
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301					Total	

ESSP.O. Box 400
PAOLI, PA 19301**Invoice**

Date	Invoice #
12/20/2005	111520

Bill To
Enrichment Service Programs, Inc. Topica Crawford 900 Linwood Blvd. Columbus GA 31902

PAID

Ship To
Enrichment Service Programs, Inc. Topica Crawford 900 Linwood Blvd. Columbus GA 31902

P.O. Number		Terms	Rep	Ship	Via	F.O.B.	Project	
		Net 30		12/20/2005				
Quantity	Item Code		Description				Price Each	Amount
1	BN		The Energy Guardian Pull Down Model					
1	BN		The Energy Guardian Rectangular Hatch Door Model with 2 " Frame					
7	BN		The Energy Guardian Rectangular Hatch 10 " Frame					
1	WUAP		Walk Up Accessory Pack					
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301							Total	

ESSP.O. Box 400
PAOLI, PA 19301**Invoice**

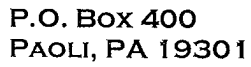
Date	Invoice #
11/7/2006	112216

Bill To
ABCD, Inc. Robert Bracera/Weatherization Dept. 1407 Fairfield Ave. Bridgeport, CT 06604

PAID

Ship To
ABCD, Inc. Robert Bracera/Weatherization Dept. 873 Wood Avenue Bridgeport, CT 06604


P.O. Number		Terms	Rep	Ship	Via	F.O.B.	Project	
R # 43582		Net 30	MJM	11/7/2006	DM Ground			
Quantity	Item Code		Description				Price Each	Amount
10	UN		The Energy Guardian Pull Down Model					
15	UN		The Energy Guardian Standard Hatch Door Model with 10 " Frame					
10	UN		The Energy Guardian Square Hatch Door Model with 10" Frame					
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301							Total	



Date	Invoice #
1/9/2006	111573

Bill To

Coastal Community Action
Stacey Ellege
P.O. Box 729
Newport, NC 28570



Ship To
Coastal Community Action Stacey Ellege 303 Mc Queen Avenue Newport, NC 28570

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
37658	Net 30	MJM	1/9/2006			
Quantity	Item Code	Description			Price Each	Amount
4	BN	The Energy Guardian Pull Down Model for Attic Stair Lids				
Please Remit Payment To ESS P.O. Box 400 Paoli, PA 19301					Total	

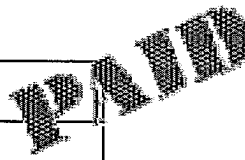


P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
12/8/2006	112271

Bill To
Handy Hands of Aiken Larry B Thomas 1670 Richland Ave. East Aiken, SC 29801



Ship To
Handy Hands of Aiken Larry B Thomas 1670 Richland Ave. East Aiken, SC 29801

P.O. Number	Terms	Rep	Ship	Via	F.O.B.	Project
atl conf	Credit card	DGM	12/8/2006	UPS		

Quantity	Item Code	Description	Price Each	Amount
8	BN	The Energy Guardian Pull Down Model		
1	BN	The Energy Guardian Pull Down Frame		
8	BN	The Energy Guardian Standard Hatch 10 " Frame/with jfu's		
4	BN	The Energy Guardian Standard Hatch Door Model with 2 " Frame with jfu's		

Please Provide Credit Card information for payment	Total
--	--------------



P.O. Box 400
PAOLI, PA 19301

Invoice

Date	Invoice #
1/31/2007	112367

Bill To
Opportunity Council Christopher R. Clay 1111 Cornwall Ave Bellingham, WA 98225



Ship To
Opportunity Council Christopher R. Clay 1701 Ellis Street Bellingham, WA 98225

P.O. Number		Terms	Rep	Ship	Via	F.O.B.	Project
V/dgm		Credit card	DGM	1/31/2007	UPS		
Quantity	Item Code	Description				Price Each	Amount
1	BN	The Energy Guardian Pull Down Model					
1	BN	The Energy Guardian Standard Hatch 10 " Frame/jfu's					
Please Provide Credit Card information for payment						Total	

Exhibit GG

Welcome to ESS, the home of the Energy Guardian™ Kits

**Energy....We all use a lot of it,
but we need to start conserving
it....and soon!**

Consider the facts:

In the last decade, the cost of energy doubled.

ENERGY STAR®, the US Department of Energy and other industry experts agree that the attic is the number one cause of energy loss in homes today.

The single largest source of energy loss in the attic is the entryway. This entryway can be a push up panel, a pull down ladder, a knee wall door or a permanent stairway.

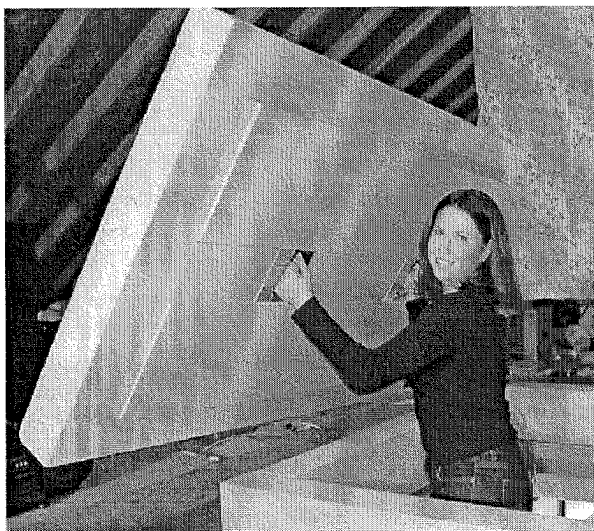
This entry creates a 5-15 square foot hole in your insulation. Even when it is closed, it also creates air leaks of 12-40 square inches or more. That's like having an open window all year.

In the winter, these problems create uncomfortable drafts and allow heated air to escape. In addition to the discomfort and wasted energy, this can result in melted snow on rooftops that causes ice damming.

In the summer, super-hot air builds up in the attic- even in attics with venting and roof fans. This super-hot air then forces its way into the living area, especially when a fan or air-condition is turned on.

Finally, dust and harmful debris are able

**ESS has created a way to make
your home more comfortable and
save on your heating and air
conditioning costs every year
with *The Energy Guardian™* Kit.**



***The Energy Guardian™* Kits** eliminate the discomfort and wasted money due to interior attic accesses (pull-down ladders, attic trap doors/hatches, knee walls and walk up staircases).

***The Energy Guardian™* Kits** close your insulation gap with an R-Value of R-30.

***The Energy Guardian™* Kits** are so effective that they can payback your initial investment in a matter of months.

***The Energy Guardian™* Kits** are lightweight and easy to use.

***The Energy Guardian™* Kits** are so durable that they come with a 20-year

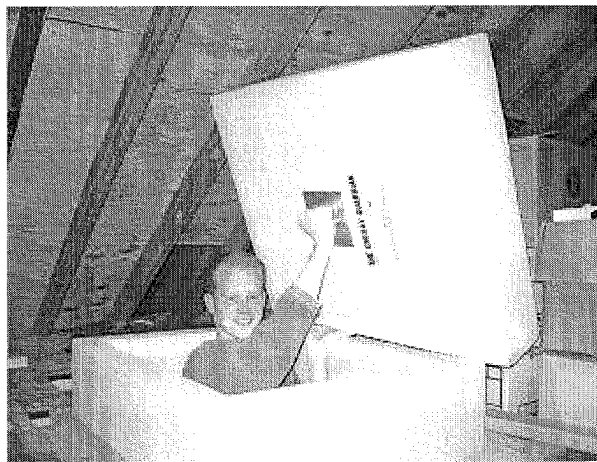
to flow freely into the home.

It's a summer and a winter problem.
Overall, it probably costs you hundreds of dollars in wasted energy every year.

You can continue with the discomfort, wasted energy, and lost money, or consider a better alternative.

[Read what our clients have to say.](#)

[Want to learn more about how much it could be costing you?](#)



warranty.

The Energy Guardian™ Kits have professional installers available through the United States.

The Energy Guardian™ Kits are environmentally friendly.

The Energy Guardian™ Kits have been awarded for Environmental Excellence.

The Energy Guardian™ Kit is made in the U.S.A.

[How To Order *The Energy Guardian™ Kit*.](#)

Make your home more comfortable, conserve Energy, and save Money with *The Energy Guardian™ Kit!!!*

As seen on [Fox News Channel's Fox & Friends](#),
[Philadelphia's CBS 3's 3 On Your Side](#)
and [Philadelphia's NBC 10 Consumer Alert](#)
[Place an Order On-Line NOW!](#)

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Solutions

In this section we provide more detailed information about the following topics listed below. If you choose to go directly to one subject matter, simply click on any of the following:

[The Cost of Attic Accesses to You:](#)

[Comfort](#)

[Energy Loss](#)

[Money](#)

[The Problem: Energy Loss Through Attic Accesses](#)

[The Solution: *The Energy Guardian*™ Kit](#)

[Specifications for the attic ladder cover](#)

[Specifications for the attic hatch cover](#)

[Installation](#)

[*The Energy Guardian*™ Kit - A Great Investment](#)

[Durability](#)

[Good for You and the Environment](#)

The Cost of Attic Accesses to You: Comfort

You have a gaping hole in both your thermal barrier and air seal in the most important area of your home. This allows heat to escape in cold weather and hot air to enter into your home in the warm months. This makes your home uncomfortable during both summer and winter months.

In the winter, the area or rooms near your attic ladder or hatch access are probably cold and drafty. If you have a two-story home and the second floor is not as warm as the first floor in the winter, then it should be clear to you that something is wrong. It defies logic since heat rises. The attic ladder or hatch is almost certainly the problem. If this is the situation in your home, then you now understand how much energy you are wasting in order for this phenomenon to occur.

In the summer, the same areas are probably hotter than the rest of your home. It can be 50-100 degrees hotter in your attic than what you want in your living area. During heat waves, the hot air accumulates in the attic and dissipates over time as the outside temperature decreases. Until that occurs, the hot air will be pushed through the opening for your attic ladder or hatch and it will spread in the adjacent rooms and area. You may have to set your thermostat lower than you want in order to make the area comfortable.

The Cost of Attic Accesses to You: Energy Loss

The loss of comfort and energy is caused by both a lack of insulation as well as air leakage. It may be decreasing the effective insulating capability of your attic by as much as 30%. If the attic access is not properly sealed, you will typically increase air leakage for your entire home by 15% or more. For details, go to [What's The Proof.](#)

Having your attic access unsealed and without proper insulation is like leaving your window open. In this case, the window is in your attic, which is the most important area of your home to insulate and seal. Most of us are not surprised that there is a draft from a window that is not closed completely during the winter. It should come as no surprise when your "attic window" causes a greater loss of energy and more discomfort.

The result is that you use far more energy than you should and spend hundreds or thousands of dollars each year to heat your attic in the winter and cool it in the summer.

There's one more problem. Since you use your furnace and air conditioner more often, they wear out sooner. These are very expensive devices to replace. You have an easy and inexpensive solution.

If you spend \$2,500 for heating and cooling your home and you reduce consumption by just 10%, you will save \$250 year after year after year. Take a moment and calculate how much you may be wasting on your utility bill.

The Cost of Attic Accesses to You: Money

How much is it costing you?			
If Annual Heat and AC costs are:	% Wasted by Attic Access	Cost to you	
		1 year	5 years
\$2,500	10%	\$250	\$1,250
	20%	\$500	\$2,500
	30%	\$750	\$3,750
\$3000	10%	\$300	\$1,500
	20%	\$600	\$3,000
	30%	\$900	\$4,500
\$4000	10%	\$400	\$2,000
	20%	\$800	\$4,000
	30%	\$1,200	\$6,000

\$5000	10%	\$500	\$2,500
	20%	\$1,000	\$5,000
	30%	\$1,500	\$7,500

The cost of energy doubled during the last decade. We don't know how much energy will increase in the next decade, but as recent market activity has shown us, it is not likely a matter of if it will increase, but rather by how much. The more the cost of energy rises, the more you will save with ***The Energy Guardian™ Kit***.

The Problem: Energy Loss Through Attic Accesses

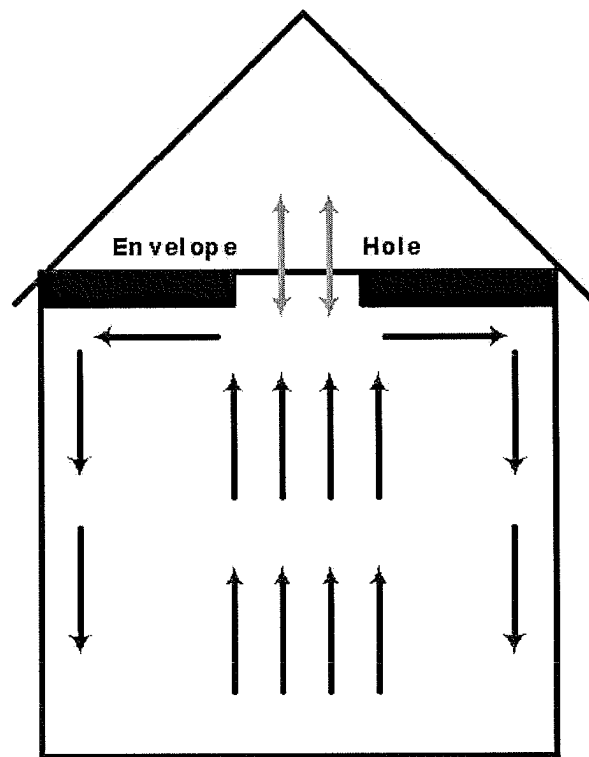
A properly insulated and sealed home creates a protective barrier for your home to keep cool air inside during the summer and warm air inside during the winter. Industry experts in the ENERGY STAR® program refer to this protective barrier as an "envelope". An effective envelope requires both a proper amount of insulation and elimination of air leaks. Without both of these solutions, your living area will have uncomfortable drafts and temperature variations. This is not just a cold weather issue. It is just as important for hot weather. Therefore, you need to seal and insulate your attic access just as much if you live in southern Florida in the summer or northern Wisconsin in the winter.

Due to the natural movement of air in your home, improper R-value insulation and air leaks will cause you to lose more energy than any other area in your home. An everyday example is to consider how you dress to stay warm on a cold windy day. You need something to stop the wind from getting to your skin and you also need clothing to keep your body heat with you. Typically, a windbreaker and sweater will provide the protection you need in this case. The windbreaker rids you of the air leaks you need from the wind and the sweater serves as a thermal barrier to keep the body heat in you. Without both articles of clothing, you would not stay warm. This same simple example applies to your home.

The plywood or drywall cover for your attic trap door or pull down ladder likely has an R-Value of .5 or less. If your attic has insulation with an R-Value of 30, then the R-Value of your attic opening is only 1/60th of the rest of the attic. In addition, you have a large opening for air to flow through. For attic ladders, you have an eight square foot opening and attic hatches four square feet or more.

What do you think the effect is on your insulating effectiveness? The diagram below illustrates the problem:

Compromised Insulation Barrier



The Solution: The Energy Guardian™ Kit

ESS Energy Products recognized this problem and has created a line environmentally friendly, low cost and complete solutions for these attic accesses called **The Energy Guardian™ Kits**. They are so unique that there are patents pending. **The Energy Guardian™ Kit** fits over the attic access opening. By blocking the escape of energy, it seals the insulation envelope in your attic that is needed to maintain a constant temperature and humidity in your living area.

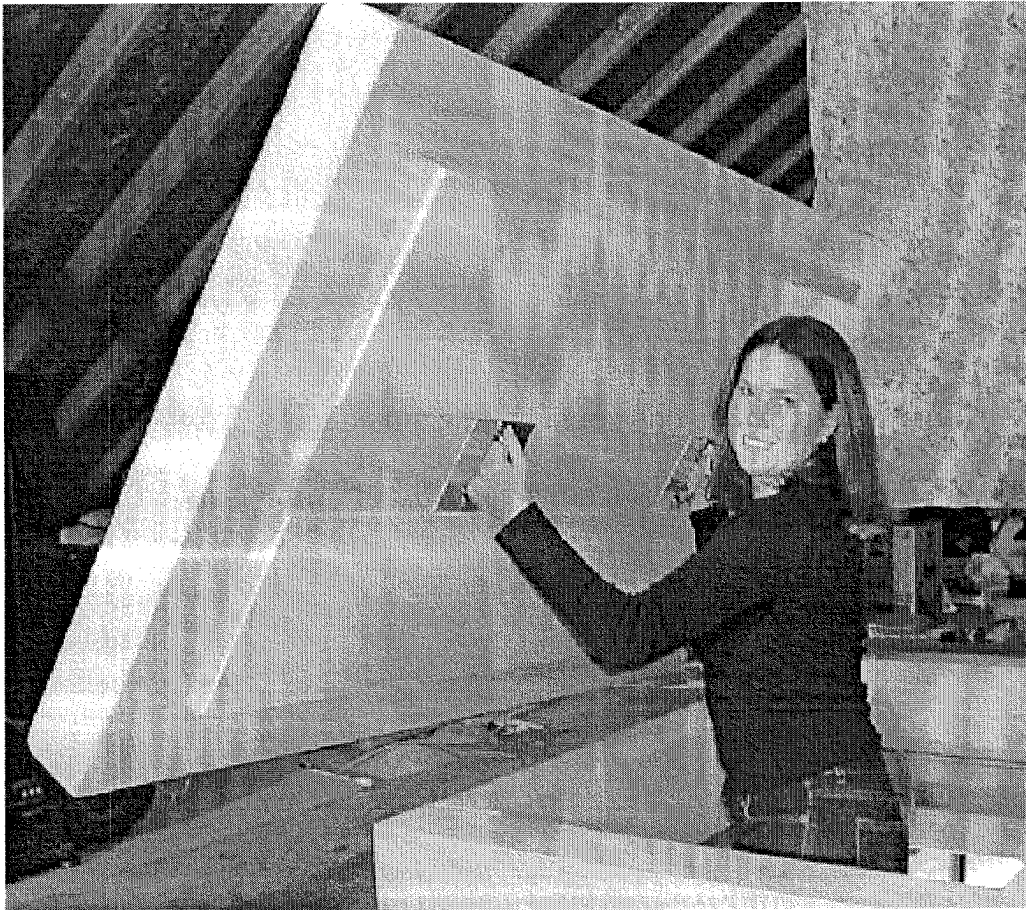
The models consist of a frame and lid. The lid has a unique lip, so that this lip fits securely into the frame. This design is important to you for several reasons. First, the frame serves as a barrier or dam to keep insulation from entering into your living area. With a two-piece unit, you only pick up the lid when you enter and exit the attic. This makes it less bulky and lighter to use. When you enter your attic through a pull down ladder or hatch opening, you simply grasp the handle(s) of **The Energy Guardian™ Kit's** lid, pick it up and set it on the attic floor. When you leave the attic, simply reverse the process and set the lid into the form fitted frame. When it closes, you can feel the snug fit. It's almost like closing a vault door. You create a tight air seal without having to secure any tightening straps.

While **The Energy Guardian™ Kit** is simple in concept, it is very unique in its design and results. It is easy to use, effective, safe and durable. It meets the standards of CFR 440 App.

A for the Weatherization Assistance Program as well as the standards for the International Builders Code to include flame spread index and smoke developed index.

The Energy Guardian™ Kit has been awarded for Environmental Excellence.

Specifications for The Energy Guardian™ Attic Ladder Cover



The Energy Guardian™ attic ladder cover will fit over any opening that is less than 35 inches by 63 inches. There is no known attic ladder made in the USA that requires a larger footprint.

It allows as much as 7 ½ inches of clearance for your ladder to fit in its folded position above your attic floor or floor joists. There is at least one commercially available model of pull down ladder that requires as much as 14 inches for clearance. While these are rare, you do not need to worry. You only need a second standard frame. With this, you then have 16 ½ inches of clearance.

The Energy Guardian™ Kit is lightweight and easy to use. The lid weighs approximately 10 lb. and the frame approximately 5 lb.

The Energy Guardian™ Kit is both a thermal barrier as well as an air sealant. The thermal resistance value is R-30.

Specifications for The Energy Guardian™ Hatch Cover



If you have a push up hatch panel, you probably realize that there is no standard size for these attic accesses. Typically, they are cut between your floor joists and are approximately 22 ½ inches or 14 ½ inches in one dimension and anywhere from 18 inches to 30 inches in the other dimension.

It would not seem possible to make a product that would fit all of these various dimensions without measuring and extensive cutting. That is not the case with **The Energy Guardian™ Kit**. Thanks to its design, it can fit any hatch opening that measures less than 28 ½ by 32 inches. Please note that the relevant dimensions are the opening in the attic. If you measure from your closet or living area, you will include your framing which can add 6 inches to the actual dimensions.

All component parts are small enough that they can fit through any opening that is at least 14 ½ inches in one dimension. The result is that you can easily bring the lightweight parts into your attic. Once assembled and resting in your attic over the hatch, it is big enough to cover a very large opening so long as it is less than 28 ½ by 32 inches.

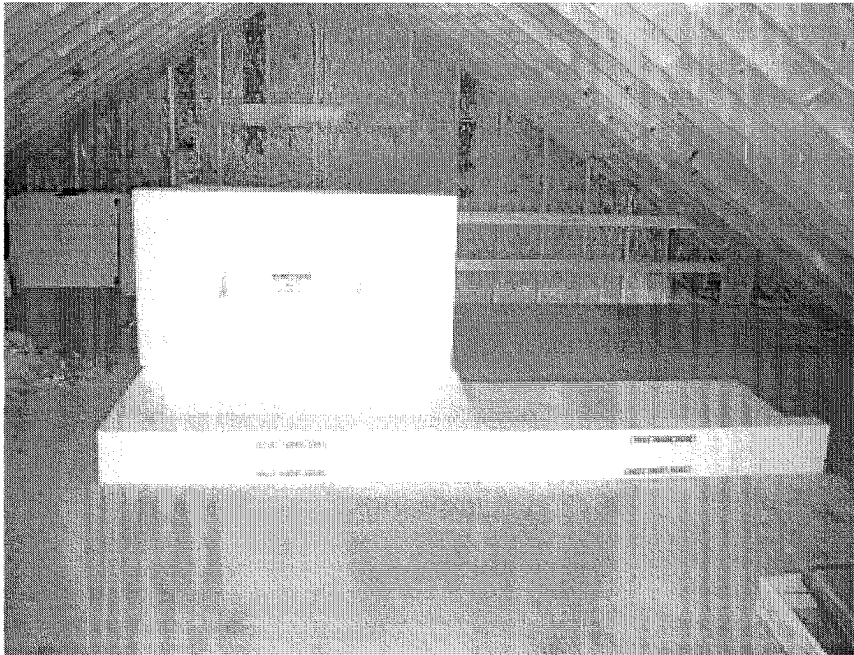
You have a choice of frames in two heights. If your hatch is tucked close to the eaves of your home, you may not have much clearance between your attic floor joists and rafters. In this case, you can buy a frame that is only 2 inches high. With the lid, you only need 7 inches of total clearance.

If your hatch opening is in an area with plenty of clearance and you plan on adding additional insulation, then you can buy a frame that is 10 inches high. For this frame, you need 15 inches of clearance.

The Energy Guardian™ Attic Hatch Cover is lightweight and easy to use. The lid weighs approximately 4 lb. and the frame approximately 1 lb for the short frame and 2.5 lb for the tall frame.

The Energy Guardian™ Attic Hatch Cover is both a thermal barrier as well as an air sealant. The thermal resistance value is R-30.

Specifications for The Energy Guardian™ Walk Up Stairs Cover

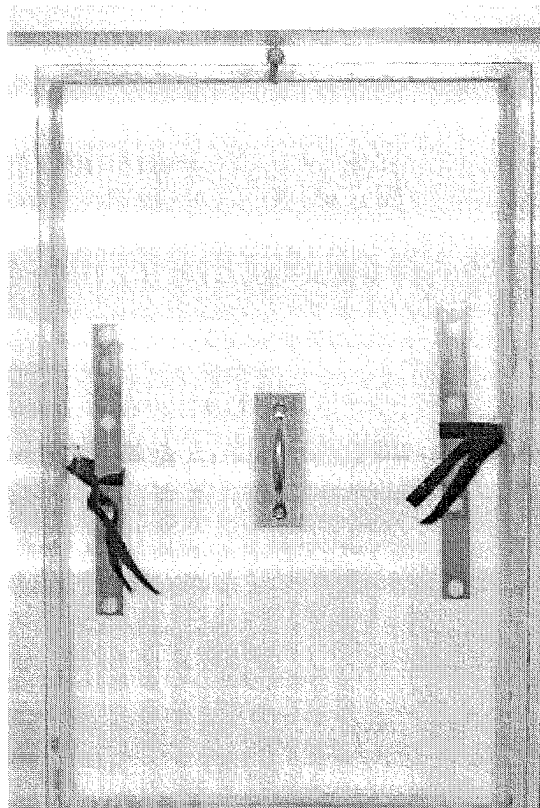


The Energy Guardian™ Walk Up Stairs Cover fits any footprint 94 1/2 inches by 44 inches or smaller. If you have an opening larger than this, we sell accessory packs to cover larger dimensions in 32 1/2 inch by 44 inch increments.

The Energy Guardian™ Walk Up Stairs Cover is lightweight and easy to use. The lid weighs approximately 10 lb.

The Energy Guardian™ Walk Up Stairs Cover is both a thermal barrier as well as an air sealant. The thermal resistance value is R-30.

Specifications for The Energy Guardian™ Knee-Wall Cover



The Energy Guardian™ Standard Knee Wall Cover fits any opening 36 inches by 36 inches or smaller. **The Energy Guardian™ Oversized Knee Wall Cover** fits any opening 35 inches by 63 inches or smaller.

The Energy Guardian™ Knee Wall Cover is lightweight and easy to use. The lid for the standard kit weighs approximately 5 lbs and the oversized lid weighs approximately 9 lbs.

The Energy Guardian™ Knee Wall Cover is both a thermal barrier as well as an air sealant. The thermal resistance value is R-24.

Installation of The Energy Guardian™ Kits

The Energy Guardian™ Kit arrives with all component parts, detailed installation instructions and a 20-year warranty card.

While it is straightforward to assemble, we recommend using certified installers to install the product and to inspect and perform very important air-sealing services in the immediate area. Ask for a certified installer when you place your order.

The Energy Guardian™ Cover - A Great Investment

We cannot predict the weather or how you maintain your home from one year to the next, but we do know that **The Energy Guardian™ Kits** eliminate a major source of energy loss. Most clients report a payback on the investment in less than one year. **The Energy Guardian™** kits provide you with the benefits from the moment you install it and for as many years as you continue to use it.

If you sell your home, make sure that your real estate agent knows that you have installed **The Energy Guardian™** Kit and explains the benefits to all prospective buyers. Save copies

of your utility bills so that you can show your specific results.

How much can you save?			
If Annual Heat and AC costs are:	% Wasted by Attic Access	Potential Savings to you	
		1 year	5 years
\$2,500	10%	\$250	\$1,250
	20%	\$500	\$2,500
	30%	\$750	\$3,750
\$3000	10%	\$300	\$1,500
	20%	\$600	\$3,000
	30%	\$900	\$4,500
\$4000	10%	\$400	\$2,000
	20%	\$800	\$4,000
	30%	\$1,200	\$6,000
\$5000	10%	\$500	\$2,500
	20%	\$1,000	\$5,000
	30%	\$1,500	\$7,500

The U.S. Department of Energy estimates that the cost of an energy audit alone can be as much as \$500. [Click here for more information.](#) (Please scroll down to Professional Energy Audits - Thermographic Inspection). Any work that is needed to improve your home is not included in that cost.

We agree with the validity of this test. However, it is important to point out that the cost of The Energy Guardian™ Kit is less than the above estimate for just an energy audit.

The Energy Guardian™ Kit is further proven as a result of stringent testing and verification. It has undergone a blower door test by a government agency that projects what the energy savings will be with the product. [Click here to see results of the Blower Door Test.](#)

In addition, infrared photos have been taken and they reveal how dramatic the effect of The Energy Guardian™ Kit has been in other homes. [Click here to see dramatic Infrared Photos .](#)

The Energy Guardian™ Kit- Durable

The Energy Guardian™ Kits are made of very dense EPS. They are not only lightweight, but also very durable. We have had a 200-lb+ man stand on it and it didn't crack or break. A professional did this in a test environment. **Do not do this as you could fall and suffer injury.**

The Energy Guardian™ Kits come with a 20-year manufacturer's warranty. Simply fill out the warranty card that comes with the product and return it to ESS.

The Energy Guardian™ Kits- Good for you and the environment

The Energy Guardian™ Kits are made with state of the art materials with attributes designed for your comfort and safety. ***The Energy Guardian™*** Kits are made with the same material that has proven to be safe and effective in household items such as refrigerators and even some children's toys.

The Energy Guardian™ Kits are environmentally friendly. Have you ever opened your attic trap door or pull down ladder and experienced the insulation particles dropping on you and into your living area? These particles can burn your eyes, irritate your skin, and even affect your breathing.

The Energy Guardian™ Kits provide you with a protective barrier or dam with its frame. Harmful insulation is kept in the attic and stopped from entering your living area.

Once you install ***The Energy Guardian™*** Kit, you will use less energy and help save our precious natural resources. You will save on both air conditioning and heating expenses so long as you have a reasonably insulated and sealed attic.

The Energy Guardian™ Kits were awarded for Environmental Excellence.

Once you install ***The Energy Guardian™*** Kit, you will have a more comfortable home.

Why wait? Start making your home more comfortable while saving energy and money for you!

[Click here to read testimonials from a few of our customers.](#)

[Click here to see dramatic Infrared Photos.](#)

[Click here to see results of the Blower Door Test.](#)

[I want to buy one now.](#)

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